D-066 part 7

| Clone | No. | | | | Accession numbers |
|---|---|---|---|---|---|
| HEOQW56 | 2207 | 883227 | 1-212 | 15-226 | U46349, AL039564, AL039085, AL039156, AL039108, AL039109, AL039128, AL119418, AL037639, U46347, AL134528, AL037094, AL037085, AL119444, AL134538, AL042975, AL037205, AL036268, AL036196, AL036190, AL042614, AL134533, AL134538, AL042975, AL037205, AL119439, AL037526, AL038531, AL119399, AL036767, AI142132, U46345, AL134518, AL134524, AL037082, AL134531, AL042450, AL042551, AL039625, AL039648, AL038520, AL045337, AL036238, AL042970, AL119488, AL042909, AL037077, AL038447, AL039678, AL039629, AL039386, AL042544, AL043019, AL043029, AL042542, AL039423, AL039698, AL038851, AL043003, AL036719, AL036733, AL037027, AL037178, AL119464, AL036774, AL037021, AL039410, AL036679, AL036765, AL036886, AL036191, AR066494, AR060234, A81671, AR023813, AR064707, AR069079, AR054110, and AB026436. |
| HEOQW81 | 2208 | 887147 | 1-1046 | 15-1060 | AW340464, and AF127389. |
| HEORC12 | 2209 | 969585 | 1-432 | 15-446 | T91937, T99157, T96469, AW082364, AI268419, AI690257, and AB007861. |
| HEORC48 | 2210 | 922885 | 1-800 | 15-814 | |
| HEORE11 | 2211 | 965904 | 1-746 | 15-760 | R93208, Z99396, AW392670, AL036418, AL036725, AL119319, AL119497, AW363220, AL119457, AA631969, AL119324, AL119483, AL119484, AL119391, AL119522, AL119363, AL038509, U46351, AL036858, U46341, AL119496, AL119335, AL036924, AL119396, AL119444, AL037205, AL119439, AL042965, AL037639, AL134531, AL039564, AL134538, AL039085, AL037094, AL119401, AL039156, AL037082, AL039108, U46346, AL039109, AL037526, AL039128, AL036196, AL134533, AL134536, AL042614, AL043029, AL134920, AL042975, AL042544, AL042984, AL037615, AL036767, AL134532, AL038447, U46345, AL037085, AL036190, AL042542, AL043019, AL037077, AL042551, AL038531, AL043011, AL036268, AL042450, AL038520, AL043003, AL036998, AL036238, AL037178, AL119464, AL036774, AL037021, AL038836, AL037027, AL036765, AL036719, AL036191, AL036158, AL036886, AR066494, A81671, AR023813, AR064707, AB026436, AR069079, and AR054110. |
| HEORE22 | 2212 | 969579 | 1-704 | 15-718 | |
| HEORE27 | 2213 | 850902 | 1-636 | 15-650 | |
| HEORE79 | 2214 | 959572 | 1-315 | 15-329 | |
| HEORF12 | 2215 | 969580 | 1-530 | 15-544 | Z99396, AW392670, AW372827, AW384394, U46349, AL119483, AL119497, AW363220, AL119319, AL119355, AL119443, AL119324, U46341, AL119484, AL119363, AL119391, AL036418, AL038837, AL119341, AL119522, U46350, AL037051, AL036725, AA631969, AL119335, AL119444, AL134538, AL037205, AL039074, AL119439, U46346. |

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| HEORH20 | 2216 | 934067 | 1 - 417 | 15 - 431 | AA460896, AA210943, H10636, W72144, AI799045, N27422, AA834765, AC007014, U63630, Z99774, AL031276, AL031584, AC002565, AC006449, AL023807, AL038413, AC007685, AL079342, AL031291, AL049539, AP000404, AC005045, AC005488, AC004674, AC002470, AL022721, AC007436, and AC000078. |
| HEORJ90 | 2217 | 918166 | 1 - 250 | 15 - 264 | |
| HEORK01 | 2218 | 914988 | 1 - 202 | 15 - 216 | |
| HEORM10 | 2219 | 963194 | 1 - 411 | 15 - 425 | Z85996. |
| HEORM21 | 2220 | 839142 | 1 - 422 | 15 - 436 | AW376621, AW404049, AA045146, AI905741, AA309643, AA192275, R06391, U66685, T85620, and AA085951. |
| HEORR01 | 2221 | 915015 | 1 - 648 | 15 - 662 | AI022223, AW179316, AI065031, AA640305, AA515165, AI744817, AI500151, T57562, AI623505, AA192366, AA209415, AW087537, AA369494, AA151880, AI340151, F17549, AA7088889, AA489919, AA569631, D29424, AA710530, AA601376, AA224525, AI683079, AL048964, R86114, AW082432, AI925588, AI383589, AW405593, AA084946, AI198211, AI926909, AW275788, AA661583, AW247866, R42954, AI520984, AW021674, AI571847, AA577764, AI809745, AA578326, AA577824, AI56767b, AI801563, AI702049, AW148821, AI002950, AA133568, F29968, AA180756, AL121039, AL133246, AL021154, AC007298, AF000348, AC006511, AC012627, U91326, AC004966, AL121923, AC003665, AC005031, AC002300, AC007308, AC005200, AC006084, Z83819, U62317, AL050321, AL109801, Z97054, AC004149, AL049872, AC005667, AC005089, AL109613, AC006014, AC005215, AC005799, AC006312, Z83844, AC004019, AC007216, AC004650, AC005180, AL049539, AC006285, AC004765, AC005488, Z94801, AC000353, AC005003, AC005726, AC005746, AF053356, AL049869, AL133448, AC002558, AC004257, AC005005, AC002077, AC006365, AC005015, AL031311, AC005531, AL024507, Z93241, Z98950, AC005519, AL008719, AC007192, AC004799, AC005940, AC006013, AC002091, AC005412, AC004638, AC005067, AC004477, AP000557, AC003957, AL078634, AC003101, AL021391, AC002377, AC008044, AC006449, AC007263, AL008637, AL078638, Z93017, AE025285, AL049636, AC003010, AC004999, AL022326, AC005332, AC005539, AC002470, AL031295, AP000356, AF165926, AC002369, AC004699, AC006211, AC005527, AC002470, AP000555, AC005484, AC007688, AL080243, AL049631, AC005913, AL009181, AL035458, AC005971, AF001550, AP000688, AC009308, AC007919, U95742, AC007277, AC001231, AC007688, AB003151, AC004985, AL121603, AC005695, AC007225, AC005755, Z97876, AF036405, Z81364, AC006455, AF031076, AC006251. |

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| HEORU06 | 2222 | 1 - 494 | 15 - 508 | AA282451, AL139796, Z99396, AW392670, AW384394, AW372827, AL119396, AL119324, AL119341, AL036924, AL037094, AL037077, AL036196, AL037082, AL036767, AL036733, AL036191, AC004798, A81671, AR060234, and AR066494. |
| HEOSI66 | 2223 | 1 - 523 | 15 - 537 | |
| HEOSJ50 | 2224 | 1 - 199 | 15 - 213 | |
| HEOSL01 | 2225 | 1 - 537 | 15 - 551 | |
| HEOSL08 | 2226 | 1 - 971 | 15 - 985 | R93538. |
| HEOSL54 | 2227 | 1 - 639 | 15 - 653 | AC007444. |
| HEOSN60 | 2228 | 1 - 665 | 15 - 679 | AC005393, and AC006133. |
| HEOSO01 | 2229 | 1 - 432 | 15 - 446 | AC003663. |
| HEOSP05 | 2230 | 1 - 680 | 15 - 694 | AL134528, AL134518, AL119363, AW372827, AL119439, U46341, AL119319, AL134524, AL119496, AL042965, AL119484, AL042970, AL134902, AL119443, AL134920, AL134533, U46346, AL134538, AL119391, AL119444, AL119396, AL119320, AL119304, A81671, and AR066079. |
| HEOSP06 | 2231 | 1 - 536 | 15 - 550 | AA278249, AA482174, AA282390, AA488762, AA489734, AW392670, U46349, AL119319, AW372827, AW363220, AW384394, Z99396, AL119483, AL119355, AL119363, AL119457, AL119324, AL119443, U46351, AL119484, AL119391, AL119341, AL119444, AL119497, U46346, U46350, U46341, U46347, AL119522, AL119335, AL119439, AL037205, AL134518, AL042975, AL042984, AL134902, AL119418, U46345, AL142137, AL134538, AL119496, AL042614, AL119399, AL042965, AL134527, AL134536, AL134527, AL134524, AL043029, AL142134, AL042544, AL043011, AL043019, AL043033, AL042450, AL042542, AL043003, AL119464, AL042551, AR060234, A81671, AR066494, AR054110, AB026436, and |

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| HEOSRS4 | 2232 | 1 - 434 | 15 - 448 | AR069079. |
| HEOSS04 | 2233 | 1 - 457 | 15 - 471 | W65492, AC005393, AC006133, and AC005515. |
| HEOST23 | 2234 | 1 - 753 | 15 - 767 | W03011. |
| HFSAC03 | 2235 | 1 - 552 | 15 - 566 | AA341979, and T92688 |
| HFSAM43 | 2236 | 1 - 162 | 15 - 176 | AA342419. |
| HFSAO59 | 2237 | 1 - 423 | 15 - 437 | AA342556, and AC005158 |
| HFSAV59 | 2238 | 1 - 264 | 15 - 278 | AW020037, AI658843, AA342731, AA828039, AI400553, and AI010597. |
| HFSAX51 | 2239 | 1 - 399 | 15 - 413 | AA342635, and R37508. |
| HFSBF09 | 2240 | 1 - 403 | 15 - 417 | AA343192. |
| HFSBG31 | 2241 | 1 - 306 | 15 - 320 | AA343240, AA343241, and AC007688. |
| HHEAA27 | 2242 | 1 - 489 | 15 - 503 | AI537538, Z83822, AC006285, and AC016025. |
| HHEAM44 | 2243 | 1 - 596 | 15 - 610 | AA489589, AB022537, and AL031228. |
| HHEAW46 | 2244 | 1 - 572 | 15 - 586 | AW262813, AW411169, R68959, and AI380261. |
| HHEBS24 | 2245 | 1 - 306 | 15 - 320 | |
| HHECK11 | 2246 | 1 - 223 | 15 - 237 | |
| HHECK33 | 2247 | 1 - 232 | 15 - 246 | I31887, and I31888. |
| HHECM01 | 2248 | 1 - 429 | 15 - 443 | AA586433, H81732, AI049701, H71738, AA878407, AI884861, AI002762, AA021139, AA320105, AA515929, AI564301, AI699049, F07564, R93854, AA074351, AA598608, AA857812, AI004740, AA721998, AI255004, AI255015, F25640, AA814719, AA351808, AI143653, AL042869, AI065043, AA736713, AI280574, AI251576, AI306232, AA326904, AA729373, AI583466, F16409, AI279417, AA468923, AI869786, AA326452, AA454504, AA846923, AI805261, AA128969, AW274191, AI246192, AA809125, AA811954, AI733647, AI904944, AI914713, AI880889, AI733662, AI590404, AA32408, AA218631, AW381823, AI865980, AA311133, AA326330, AA507526, AI282479, AA484892, AW100484, AI567391, AA584484, AW238712, AI289396, T49933, AA595656, AA492105, AI983047, N20173, AA374797, AI470068, F35097, W44359, AA720582, AW328331, AA503298, AI921491, AA405726, AA558404, AW166920, AI610737, AW128881, AA652059, AF003626, AC004999, AC002554, AC007193, AC006008, AC004975, AC005998, AC006530, AC005625, AF124730, AF165926, AP000066, AP000280, AC003964, Z95703, AC005697, AF024534, AP000039, AP000107, AL110502, Z73963, Z93023, Z98950, AL133494, AP000224, AP000086, AP000045, AP000113, AF053356, AC005003, Z84477, AC005412, AL049780, AC007429, AC005086, AL031277, AC006137, AC005237, AL133163, AC007680, AC009247, AC007429, AC009275, AP000314, AC004948, AP000194, AL031666, AL050308, AC006538, AC004236, AP000153, AL132987, AC004782, AC005193, AC006130, Z82189, AC005839, AL049869, AB026899, AL031885, AC007536. |

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| HHECM66 | 2249 | 781893 | 1-375 | 15-389 | Z83822, AC005620, Z83826, AC005380, Z97183, AC004743, AL022323, L47234, AC006146, AL133353, AL049779, AC000085, AL022163, AC005225, AL031284, AL109758, AC004997, AC005393, AC004241, AF111168, AC005829, AC004882, AL034430, AL021393, AL022322, AC005544, AC002401, AB015355, AC006529, AC005585, AC005594, AC004963, AC007051, AL133448, AC004804, AC005203, AP000359, AL049589, AC006111, AC007919, AL109798, AC005529, AC004650, AC004778, AC002110, AC006141, AB023178, AC002314, AC000088, AC002350, AC006071, AL049795, AC005358, Z81364, AC003965, AC005763, AC000071, AF048940, AC002477, AD000671, AC002347, AC002128, AC002390, Z82184, AP000501, AC009784, 1173637, AL023575, AL021546, AC003663, AC002563, AC004797, AC003098, AC005736, AC004789, AL031311, AL133371, L78810, AC004234, Z83844, AC002455, AC002996, AC004832, AC006581, AC006487, AC007278, AP000553, Z82097, AP000252, AB022785, AP000134, AL006635, AL035587, AP000031, AC005058, AC005480, 295152, AL049636, AL022333, U82696, AL049538, AC005369, AP000111, AP000043, AC004837, AC006372, AP000504, 229373, AC002527, AC004648, AC005726, 297989, AL133355, AL049874, 297196, AC004520, AL049540, AC004674, AL117337, AC006432, AF205588, AC003109, AL121653, AC002351, Y11107, AF015416, AC000115, U07561, AC002511, AC004223, AC002395, AC002195, AC005581, AC004985, AC005895, AC004938, AC005099, AC004099, AP000270, Z69890, Z94056, and AP000500 |
| HHECO01 | 2250 | 915285 | 1-311 | 15-325 | H63677, and AL020997. |
| HHECR08 | 2251 | 959125 | 1-565 | 15-579 | AF039241, T07305, AC004150, AF039691, AF132608, AF207748, and AF006602. |
| HHECT58 | 2252 | 973110 | 1-430 | 15-444 | AI913928, AA480258, and AA493192. |
| HHECT59 | 2253 | 858407 | 1-517 | 15-531 | AW079676, and AI291307. |
| HHECT70 | 2254 | 753842 | 1-147 | 15-161 | AA356150 |
| HHECX82 | 2255 | 915913 | 1-523 | 15-537 | AL042096, AL040576, AL040768, AL038532, AL044258, AL041577, AL043570, AL041459, AL043848, AL043814, AL038983, AL039316, AL043923, AL044064, AL042135, AL043845, AL040052, AL041374, AL046392, AL043627, AL041523, AL041730, AL040148, AL040082, AL044272, AL040329, AL040294, AL040091, AL040263, AL044187, AL044199, AL040458, AL045990, AL041635, AL044074, AL038838, AL045920, AL041602, AL043492, AL044165, AL043775, AL041752, AL040839, AL046442, AL043677, AL040745, AL045684, AL040617, AL040332, AL040255, AL040285, AL040342, AL040091, AL040128, AL040168, AL044037, AL041186, AL040322, AL043467, AL040510, AL040625, AL045817, AL041142, AL041238, AL047183, AL043183, AL046330, AL041051, AL041292, AL040119, AL047036, AL047170, AL047057, AL047219, AL039915, AL037435, AL043612, AL041197, AL043537, AL041186, AL044274, AL045753, AL040253, AL041131, AL039360, AL037727, AL040529, AL045857, AL041227, AL040018, AL045725, AL040553, AL038822, AL037436, AL041159, |

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| HHEDB31 | 2256 | 697806 | 1 - 589 | 15 - 603 | 166482, 166485, AR027319, A47368, 107249, 166483, 166484, A91752, E03813, 166498, 166497, 166496, A91751, 166487, 166486, 119516, A06419, A21892, 119317, AR027318, 118776, AR008829, A23997, A83151, A68114, A95096, A63954, Y09813, A95106, A95105, AR027099, A63067, A51047, A63064, A21895, AR035975, AR035974, AR035976, AR035977, AR035978, A05160, A08030, A20502, AR003585, 163560, 163561, 163563, 125041, A76773, A22413, A120935, 156772, 195540, A63072, A89633, A89634, A58521, AR020969, AR051652, AR051651, and X07299 |
| HHEDH57 | 2257 | 665762 | 1 - 655 | 15 - 669 | W19045, N57242, N41553, and AC000119 |
| HHEDJ94 | 2258 | 906876 | 1 - 509 | 15 - 523 | R80434, AA531428, Z82215, and Z95114 |
| HHEDM03 | 2259 | 923908 | 1 - 448 | 15 - 462 | AA553409, AI762528, AA167656, F16848, AA593168, AW103030, AI925065, AI823705, H12857, AI824476, AW440368, N41775, F30650, W45416, AA993636, AI025930, W02497, AA828592, AW088631, AC005015, AC004859, AC004000, AC006271, AL133353, AC005288, AL008719, AP000552, AF207550, AC005940, AC005911, AC004821, AL031848, Z81364, AC004087, AC002456, AL022163, AL035071, AC004686, AC005695, AC000025, AC005330, AC002565, AP000167, AP000556, AC003963, AL035089, AC005859, AP000502, AC005041, AL031230, AF135187, AC005696, AL049669, AC008172, AF047825, AF134726, AB023059, AC007878, AC005612, AC005519, L78810, AL049869, AC002544, AL049694, AL035086, U80017, AC005484, AC006449, U73169, AL035587, AL050307, AC002347, AL049839, AL031311, AC002316, AL049780, AF111167, AL109952, Z93241, AC007226, AC004832, AC002350, AL050318, AC005203, AC006960, AP000122, AP000509, Z97056, AC007934, AC010170, AC005531, AL034420, AC006111, U95742, AL031685, Z99716, Z68223, AL022316, AC005089, AL022326, AP000359, AC003025, AC002425, AC005362, AC007551, AC000159, Z85987, AC006285, AL121578, AC004583, AL022345, AC006538, Z95152, AC007216, AC012627, Z83822, AF139813, AP000326, AL109798, AC005846, AL079340, AC005736, AC004797, U91321, AC007160, AC004999, AP000113, AP000045, AC007041, AP000169, AP000054, Z84484, AL023803, AL023553, AL049776, AP000300, AC004228, AL023807, AC005180, AC004520, AC003913, AC007536, AC005567, AC005527, AC006121, AC005399, AF036405, AC005839, AC005529, AC007055, AL009181, and AL035422 |
| HHEDN93 | 2260 | 731067 | 1 - 360 | 15 - 374 | AI279905, AI859460, and AA353599 |
| HHEDO53 | 2261 | 973320 | 1 - 59 | 15 - 73 | |
| HHEDO74 | 2262 | 463250 | 1 - 432 | 15 - 446 | AA975530, AI376755, AA931603, AA830053, AA912944, AA926705, AI445635, and AA954467 |
| HHEDP88 | 2263 | 878759 | 1 - 371 | 15 - 385 | AA297299, AI990951, AA412438, AA150262, AA937163, AA757561, N32544, AI126496, AA872939, and R61273. |

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|---|---|---|---|---|---|
| HHEDR27 | 2264 | 791847 | 1-563 | 15-577 | U63127. |
| HHEDW03 | 2265 | 923340 | 1-421 | 15-435 | |
| HHEDW58 | 2266 | 735609 | 1-509 | 15-523 | AL132712. |
| HHEEC07 | 2267 | 952455 | 1-2410 | 15-2424 | AW271777, AA418212, AW026172, AW080197, AW150080, Z99393, AW296033, AI738581, AA452203, AA418041, AA028164, AA035728, AW138718, AW027368, AI861850, AI149306, AA194725, AA845357, AAS21457, AA394270, AW003395, AI961396, AA476994, AI815175, AA621790, AA292291, AI917710, AI580942, AI831206, AI422238, AI337202, AI684220, AI758685, AI769662, AI363149, AI372022, AA149978, AI459301, AI916905, AA426479, AI090412, AI333285, AA195566, AA477023, N26319, AA453007, W79139, NX6051, W744464, N27382, W17034, AI536804, AI336594, H83596, AI524485, AI092161, AW087165, AW439123, AA829164, AW192237, AA765990, AI803792, AI253581, AW196349, AA160311, W07012, H96016, AI963237, AI915904, C16527, AI468579, AA379225, C16442, AI867613, T23879, AA918013, AI224581, AI224589, AA373431, AA639187, AW261888, AA894881, H43838, AA081258, AW088913, AW024050, D61727, H96017, AW160880, AW161522, AW161495, AI090929, N89775, Z99394, C21261, AI687157, AI620764, N39762, AI814820, AA354795, AA476912, AI624528, N79269, D25568, AF064257, D38517, and AC004222. |
| HHEEC61 | 2268 | 741280 | 1-262 | 15-276 | AF200630, AF201372, and AL022313. |
| HHEEK88 | 2269 | 702337 | 1-522 | 15-536 | AI261872, AI679138, AI434461, AI379427, AI679712, AI963616, N98728, AI823643, AI769963, AA855094, AW294343, AA398469, AI341436, AI660067, AA970537, AI682850, C01626, AA401874, AI985926, R71022, AA772273, W31010, AA705992, AI862548, T26896, and AF058849. |
| HHEEL47 | 2270 | 719825 | 1-535 | 15-549 | AI703499, AA494263, AI002734, AI054352, AI273847, AI580250, AI253382, AA502991, AA728812, AA811208, AA834707, AA594072, AA654661, AA452325, AA484143, AI674840, AI922910, AI205009, AI002941, AA62243, AA579205, AA747540, AA776646, AW327624, AA515728, AA486559, AA442176, AW084246, R81017, AA436796, AA297538, AA582463, R62710, AL079734, AA984187, AC007055, AL049780, AL133500, AC004765, AL031685, AC004466, Z83840, AC004099, AL031177, AL049610, AL121825, AC004682, AC007103, AC004655, AC006312, AC006543, AC006367, AC006137, AC007387, AC006844, AC004984, AC006531, AC005669, AC031428, AL031283, AL024498, AC006166, AC007214, AP000337, Z81364, AC006115, AL018633, Z99716, Z93783, AC005722, AC006365, AB023051, AC007225, AC006978, AL035420, AC001037, AP000961, AC007193, AP000512, AL031662, AC007842, AF011889, AB023048, AL034425, AP000511, Z97054, AC005190, AL034420, AC004217, Z84469, AC004552, U91322, AL035697, U91327, AC005146, AC002080, AL033525, AP000704, AL133445, AC003043, AL035697, AC008154, AC004605, AC002542, AC005696, AP000513, AC009743, Z97630, AL121769, AI229041, U07563, AP000285, AL133163, AL009174, AC005065, AC005212, U78027, AC004685, AC007285, AP001052, AC003950, AC005701, AC007707, AC007226, AC006538. |

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| HHEFB29 | 2271 | 696073 | 1-532 | 15-546 | AC005826, AC006379, AL035422, AL133246, AC004817, AL020997, AP000493, AL008710, AL049539, AC005094, AC009044, AC003035, AJ010598, AC009275, AC005353, AL031777, AC000118, AC006966, AL034350, AF196971, AC005015, AL022238, AC005050, AC005180, Z82179, AL049759, AC004231, AC002430, AL031297, AC007384, AC005821, AL031054, AL049759, AL232283, AL022144, AC002072, AC005089, AL133245, AL121603, AC005200, AL022399, AL035405, Z93244, AL008583, AL031121, Z92542, Z86061, AL034549, AC005340, AC005953, AC000404, AL035403, AC004998, Z99127, AC004593, AC005011, Z82208, Z85995, AC004152, AC004526, AF064860, AL035246, AC006021, AC004594, AC003108, AJ010597, AC005005, AC003669, AL109759, AC005539, AC006021, AC008041, AC005066, AC006536, Z95333, AL008715, AL031767, AC005358, AL049776, U91326, AC005066, AC006536, Z95333, AC004832, AC005747, AL035410, AL109827, AP000008, AC005154, AL021391, AC005933, AP000252, and AP000134. |
| HHEFB73 | 2272 | 947568 | 1-432 | 15-446 | AW402864, AC005756, AL096767, and AC000119. |
| | | | | | AL039087, AL037259, AA362688, AA362689, T29199, AA362690, A49045, 107209, AR067734, 107249, AR068508, AR068510, A63954, 109267, 109270, 109268, 109269, A49701, 109252, 109251, A29109, A32111, AR068550, A23373, AR068551, A94048, A94061, AR035224, A94046, A94054, 158322, 158323, E01324, 108638, A27169, A27170, A39929, A83151, AR038307, AR038321, AR016495, 166495, 166494, 166496, 166497, 166498, 166486, 166487, A93936, 191969, Z96177, E01619, E01239, E01561, A92081, A92080, A92077, AR067733, AR038306, AR029418, A92078, A92079, AR029417, AR038320, AR027319, A91752, A91751, A70359, AR067731, AR027318, AR054109, AR067732, AR038066, AR064436, AR051651, and AR051652. |
| HHEFK12 | 2273 | 966292 | 1-317 | 15-331 | AA010070, and AI870529. |
| HHEFL47 | 2274 | 973094 | 1-356 | 15-370 | AL022318, and AL031846. |
| HHEFZ5x | 2275 | 735615 | 1-366 | 15-380 | |
| HHEGA66 | 2276 | 969467 | 1-247 | 15-261 | |
| HHEHC74 | 2277 | 974406 | 1-725 | 15-739 | AA314262, and Z84466. |
| HHEHD94 | 2278 | 964103 | 1-306 | 15-320 | AC006468. |
| HHEHU73 | 2279 | 923895 | 1-432 | 15-446 | |
| HHEHW78 | 2280 | 973140 | 1-579 | 15-593 | |
| HHEHJ19 | 2281 | 973230 | 1-512 | 15-526 | |
| HHEJHJ9 | 2282 | 961974 | 1-536 | 15-550 | AW277207, AW157157, AI816301, AW156950, AA313026, AA152106, AI313177, AW163123, AW161415, AI382960, AI201561, AA773272, AA826520, AI267630, AW081919, AA731178, AA017675, AW390380, AI222064, AW390751, AF180920, AF159159, and AF030091. |
| HHEJY91 | 2283 | 974407 | 1-521 | 15-535 | AA904211, AW304580, AA515728, AA833875, AA833896, AA526099, AA515351, AI733856, |

AI923451, AI635028, T74524, AI732789, AI078409, AA644090, AI813783, AA602906,
AI754653, AI923458, AI587467, H07953, AI744830, AI870453, AA825827, AW028943,
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AA084609, AA487475, AI669589, AA622801, AA568204, AI860751, AA411788, AW410354,
AI445934, AW088856, AA572813, AI499954, AW338860, AA713705, T07974, N23504,
AI457596, AA225890, AA679194, AI962030, H69661, AI819994, AI251576, AA862183,
AI821768, AA492264, AW300749, AI533397, AI858814, AI493264, AI628224, AA578621,
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| | | | | | |
|---|---|---|---|---|---|
| HHEKG10 | 2284 | 961957 | 1 - 399 | 15 - 413 | |
| HHEKJ20 | 2285 | 918032 | 1 - 214 | 15 - 228 | |
| HHEKI27 | 2286 | 858384 | 1 - 478 | 15 - 492 | |
| HHEKK06 | 2287 | 933849 | 1 - 459 | 15 - 473 | |
| HHEKP61 | 2288 | 913413 | 1 - 1448 | 15 - 1462 | AA679016, AW408019, AA251937, AW407984, AI623302, AI431307, AI431316, AW392670, AI432644, AW372827, AI791349, U46349, AI432653, AI431243, AW081103, AI432655, AI432654, Z99396, AL064243, AW384394, AL134536, AW363220, AI432661, AI431255, AL042551, Z99396, AI432677, AI431337, AI119401, AI432651, AI431230, AI431328, AI431310, AI431312, U46351, AL119355, U46345, AI492510, AI431347, AL119497, AI431358, AL039912, AI432657, AI431354, AI432649, AI432647, AI432675, AL119483, AI431247, AI432643, AI431248, AI431330, AI432662, AI432665, AI492519, AI431314, AL037205, AL035530, AR066494, AF011249, AB026436, AR060234, AR054110, Y17793, A81671, and AF064854. |
| HHEKS53 | 2289 | 973233 | 1 - 449 | 15 - 463 | AA38228, AA599423, AI289850, AI275183, AA584125, AI583291, AI571543, AL031293, AC005207, AL109758, AF111168, AL034402, AC005183, AC005348, AC005790, AC005229, AF134726, Z97630, AL049836, AL022316, AC004024, AC006487, AC016027, AP000503, AC016830, AB009667, Z83838, AL031228, AC005821, Z98743, AC005839, AF064860, AC004820, AC005291, AC005863, AL096706, AC004865, AC007324, AC007917, AC008101, AC004079, Z84483, AC008079, AF111167, AL021154, AP000098, AL034423, AL031311, AC005318, AC004000, AL022312, AD001502, AC005482, AC005399, AL022726, AC004020, AC007227, AL049764, AL031053, AL121754, AP000355, AC004805, and AC006536. |
| HHELD03 | 2290 | 868405 | 1 - 883 | 15 - 897 | H09835, and R61607. |
| HHELD11 | 2291 | 974419 | 1 - 172 | 15 - 186 | |
| HHEMA34 | 2292 | 704035 | 1 - 354 | 15 - 368 | H66668. |
| HHEMA65 | 2293 | 719229 | 1 - 286 | 15 - 300 | |
| HHEMD28 | 2294 | 858303 | 1 - 371 | 15 - 385 | |
| HHEMK21 | 2295 | 670784 | 1 - 443 | 15 - 457 | AA150780, AA341445, H65527, N28990, AA972976, AA359399, T55030, AA287792, AC009330, AC009542, AC003689, and AC003678 |
| HHEMN76 | 2296 | 752947 | 1 - 437 | 15 - 451 | |
| HHEMO91 | 2297 | 790100 | 1 - 257 | 15 - 271 | AJ230802. |
| HHEMQ56 | 2298 | 858289 | 1 - 363 | 15 - 377 | AL109748, and AL078614. |
| HHEMQ58 | 2299 | 952989 | 1 - 508 | 15 - 522 | |

| Clone | No. | ID | Range | Range | Accession Numbers |
|---|---|---|---|---|---|
| HHENC18 | 2300 | 666335 | 1-412 | 15-426 | |
| HHEND28 | 2301 | 468911 | 1-500 | 15-514 | AL109827. |
| HHEND45 | 2302 | 919630 | 1-318 | 15-332 | |
| HHENE18 | 2303 | 806606 | 1-500 | 15-514 | AC002390 |
| HHENE38 | 2304 | 662972 | 1-432 | 15-446 | |
| HHENE47 | 2305 | 720255 | 1-382 | 15-396 | AC004585 |
| HHENG31 | 2306 | 917904 | 1-622 | 15-636 | AI266255, AI302710, AA505091, AI076214, H82739, N30416, AA758853, H83614, AI362648, N79746, T77931, AW013896, T77853, and AL031291. |
| HHENH93 | 2307 | 691023 | 1-377 | 15-391 | AA595183, H29208, H29209, and AF102777. |
| HHENO53 | 2308 | 709078 | 1-289 | 15-303 | |
| HHENQ16 | 2309 | 661841 | 1-547 | 15-561 | |
| HHENR11 | 2310 | 969906 | 1-936 | 15-950 | AW007450, AW021951, R56093, AI809818, AF118885, AC002468, AL109627, AC005004, AC005562, AC008273, AC005082, AL034555, AC004815, L44140, AC006023, AL133243, AC018633, AC006538, AL132712, AL080243, AC005839, AC007666, AC007041, AC006137, AL031983, AC007846, U85195, AC005703, AL132857, AC005488, AL009179, AC005563, AC005104, AC004019, AP000704, AC007738, AC005252, AL031595, AL008582, AC006077, AF043945, U07563, AL109963, AC007182, AP000295, AC006049, and AC008041 |
| HHENR78 | 2311 | 775537 | 1-417 | 15-431 | AC005326, and AC004924 |
| HHENV38 | 2312 | 657383 | 1-401 | 15-415 | AI990739, AI927951, AI989475, AI990284, AI082831, AW295986, AI798629, AI380475, AA777280, AI350438, AI867928, AW194833, AI478440, and AI758120. |
| HHEN286 | 2313 | 670837 | 1-436 | 15-450 | |
| HHEOF20 | 2314 | 861457 | 1-347 | 15-361 | T63737, and AC004755. |
| HHEOF58 | 2315 | 841978 | 1-483 | 15-497 | |
| HHEOG17 | 2316 | 662948 | 1-342 | 15-356 | |
| HHEOG67 | 2317 | 588154 | 1-326 | 15-340 | |
| HHEOI18 | 2318 | 677891 | 1-381 | 15-395 | AA976063, AI688977, AI291003, AA379679, AI796262, AA889834, AA147542, AA383327, AI857560, AA234045, R81076, AI924779, AA826483, AI168773, AA190557, AI689857, AI041119, AI703295, AI802472, AA349132, R25344, R23959, AI360000, W60453, AI557581, and AF048977 |
| HHEOJ10 | 2319 | 911814 | 1-450 | 15-464 | AW385142, AW375056, AW062951, W19655, and AA452790. |
| HHEOL59 | 2320 | 588168 | 1-519 | 15-533 | |
| HHEOX60 | 2321 | 734311 | 1-400 | 15-414 | |
| HHEOZ17 | 2322 | 793087 | 1-393 | 15-407 | |
| HHEPD46 | 2323 | 718950 | 1-550 | 15-564 | AI653678, T60029, N58301, AW162128, AI859744, AI273990, N73203, AA506744, R85174, AA366676, AI879951, AA653291, R32162, AW166824, AI018726, R93026, AA811150, AA577719, M77867, AA744993, H78281, AW189401, AA737523, AA642823, AA632565. |

AI671077, AI017733, AI709211, AW272389, N83628, AA614647, AA303054, AI445914,
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AI804546, AA176809, AW277064, AI679294, AA601291, AA526413, AI904944, T51743,
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AA664924, R97635, AA525517, AW237005, AW120198, AA66138, W24312, AI733523,
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AL049636, AC006541, Y12855, AC007263, AC005899, AP000306, AL031230, Z99716, AC002306,
AL034429, AJ006996, AC007263, AL022315, AP000115, AC005244, AL031117, AC007364, AC006079,
AP000047, AL008712, AL022315, AC005539, AC005703, AJ239318, D87009, AC003043, AC007880, Z80232,
AC006112, U85195, AC005539, AC002106, AL031730, AL022311, AC004771, AC004596, AC005102,
AC022719, AC002107, AC002106, AP000345, AC003007, AL096891, AC007376, AC005019, AC005632,
AC004016, AC004891, AP000345, AC003047, U51561, AC005602, AL049747, Z75890, AC006930,
AP003008, AC007792, AC003047, AL008989, L47234, AL096703, AP000048, U95739, AC003692,
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| HHEPD73 | 2324 | 966828 | 1 - 548 | 15 - 562 | AW102944. |
| HHEPF31 | 2325 | 858269 | 1 - 355 | 15 - 369 | |
| HHEPG15 | 2326 | 659664 | 1 - 548 | 15 - 562 | AF150253, AI743143, X85654, and AF161548. |
| HHEPK28 | 2327 | 686489 | 1 - 342 | 15 - 356 | |
| HHEPM73 | 2328 | 683270 | 1 - 414 | 15 - 428 | AA505298. |
| HHEPN44 | 2329 | 716494 | 1 - 928 | 15 - 942 | R10189, AI984168, AA583386, AW020198, AL042667, AL042670, AI917132, AI003469, AI915081, AI310670, AA124108, AW247338, AI612070, AA614254, AI611533, AA224859, AL044701, AI310787, AA904211, AI889995, AI828721, AI653499, AW082104, AA468505, AA182873, AA487209, AA644090, AI962030, AI349130, AA613624, AA557945, AA525331, AA640104, AA728954, AI792092, AA230025, AI653776, AI821805, AA493808, AW270385, AI732720, AA551519, AA213928, AW020004, AW021015, AA250267, AI567676, AC005295, AC005067, AL035681, AA653139, AC003108, AC002351, Z99714, AC004019, AC005102, AC002554, AL031281, AL022316, AC005520, Z95115, AC006285, AC005632, AC005972, AF001549, I882268, AC003041, AC005553, Z95116, AC004448, AL033527, AC005004, AC016025, AP000555, AC005529, AP000553, AL133448, AC004859, AC005280, AD000092, AP000501, L44140, AL009181, AC017510, AC005527, AL121658, AL023879, AC009247, Z93244, Z85986, AC004913, AC009498, AC005228, AC005288, AL031311, AC004834, AC005081, AP000503, AC005250, AC005231, U89335, AL133246, AC005808, AP000263, AC004263, AL135960, AJ131016, AL121655, AC004098, AC005670, AL022721, AC005089, AL050307, AP000104, AC007919, AF207550, U52112, AL049758, AC002347, AL008706, U07561, AC004601, AC002300, AC004000, AL121754, AC006965, AP000036, AF111169, AL044692, AC006511, Z97056, AP000133, AC005900, AC004526, AI003147, AL132992, AL035684, AC002310, AC006449, AP000601, AC005684, AC002091, AC005277, AL096791, AL031230, AL049757, AC007240, AL031289, AC005011, AF053356, AP000688, AC005519, AL139054, Z95113, AC006372, AC005071, AF196779, AC004876, AC006006, AC005412, AP000116, AF134726, AC005409, AC005880, AL078581, AC004967, AC005015, AL034400, AL022326, AC005484, AC004962, AL121748, Z93241, AC004973, AC005468, AC005746, AC006014, AC007938, AC005006, AC004897, AP000511, AC005618, AC004797, AL008718, AL121653, AC005488, AC007055, AC003109, AL022329, AC005300, AL133163, AL049616, AL109967, AC005924, Z73979, U95739, AC004929, AC005595, AC005933, AC004799, AC007676, AC002381, AC007390, AC006241, AC005535, AC006277, Z75407, U78027, AC004125, AC005856, Z94044, AL020993, AC005057, AC007536, AC005086, AF205588, AC002126, U47924, AL133353, AL031432, AP000696, AC007436, AC003956, AC005694, AP001947, AC003013, AC005013, AC002544, AC005041, AL096677, AF109907, AL049835, AP000045, AP000113, AC008372, AL121595, AC003030, AC004765, AC004805, AL031602, AL035588, AL049694, AL034418, AL035422, AC007546, AC005940, AC004815, Z83840, AF015416, AC006064, AC002477, AC003042, AL109865. |

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| HHEPR14 | 2330 | 869381 | 1 - 640 | D00591, AC004820, AC004695, AL049631, AP000210, AP000132, Z98743, AC003043, AC006946, AL031670, U91325, AC004150, AC006023, AC005088, AC006480, AC003101, AL049780, AL078639, AL008715, AC007899, AL035412, AC006597, AC005726, AL008710, AL049760, AL034379, AP000108, AP000040, AC004817, AC004257, AC002430, AL133396, AC005393, AL049874, AC005914, AC004787, AC006948, and Z82178 |
| | | | 15 - 654 | W86315, and AI674685. |
| HHEPS91 | 2331 | 493744 | 1 - 552 | AA021193, F04252, AI133083, AI783911, AA557945, AA535216, D44672, AA773463, AI143051, AA602017, AI355246, AA488746, AA828637, AI355559, AA676592, AA904275, AI249365, T52772, AA484892, AW419389, AA649642, AA828834, AA533176, AA180056, AA601356, AI813957, AA693889, AI281818, AW089950, AI627917, AI753536, AW277109, AA745524, AI821716, AA568314, N95817, AI356440, AI620585, AA491423, AA355367, AA610433, AI635677, AI754293, AW028950, AI623764, AW104788, AI872503, AA579188, AI810584, AA744465, AA745470, AA744449, T47138, AI242502, AC004752, AC009275, AC007955, AC005229, AL049832, AC008009, AC005527, AC005529, AC002425, AC003108, AL031681, AC004019, AP000014, M13792, AC007386, Z99716, AC002543, AC007055, AL008582, Z83844, AC005180, AB020865, AC010205, AC004876, AC000025, AC005510, AF001548, AC006312, AL049759, AL049769, AL049869, AC007731, AF134726, AC007161, AL121603, AC005500, AC004984, AL121769, AL008718, AL121658, AC006449, AC005156, AC004655, AL033527, AI022320, AF019413, AP000212, AP000134, AC005089, Z98884, Z97196, AC005081, AC002456, AC007687, AL049776, AL117694, AF111168, AL133163, AL034417, AC005823, AC006511, AC005328, AC005971, AC002247, Z98304, AC000353, AC004067, AC007666, AC004796, AC006468, AC007376, AC008124, AC012627, AC005015, AC005899, AL021407, L78833, D87675, AC002432, AC006578, AC004859, AL021154, AC007216, AL033659, AC007688, AI003147, AL121653, AL031074, Z84469, AC007263, U80017, AL133245, AC002302, AP000509, AC004686, AL031295, AC004103, AC007546, AL135744, AP000030, AC002477, U91323, AP000501, AC000004, Z84467, AL050343, AC005222, AC002553, AC007367, AL096678, Z98257, AC008372, AL139054, AL022313, AF109907, AC007226, Z98751, AC002400, AP000141, AL049757, AC000052, AC006211, Z86090, AC005011, AL035249, AF205588, AF205588, AC007308, U91318, AC004253, AL022336, AC005962, AL031668, AC004821, AL096710, AL121655, AP000045, AC005519, AC006285, Z98949, AC007283, AC004106, Z93023, Z83822, AL024498, AL022238, AL034420, AL021395, AC006538, AC005972, AC005332, AC002350, U91322, AC008040, AC007277, AC005041, AC007566, AC006538, AC005222, AC005209, AL009051, AP000553, U52112, AC005291, AC006559, AC005358, AL031273, AF064858, AP000555, AC006121, AC000003, AF001550, AC005696, AC016025, AF064622, AC006077, Z97183, AC006059, AC008015, AC005746, AC002991, AC002470, AC008079, AC005874, AF134471, AL133246, AC005037, AL035423, AC003043, |
| | | | 15 - 566 | |

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| HHEPZ10 | 2332 | 963715 | 1-155 | 15-169 | AC005145, AL031672, AC004526, AL132777, AL121852, AC004598, Z82198, AP000349, U47924, AC005632, AL049830, AL034549, AC002312, U91326, AC002299, AL049874, AC004813, AC007371, AC005620, AC006023, AL035460, Z97056, AC007444, AC007540, AC005233, AC005535, AC005815, AL020997, AC002404, AC005288, AP001051, AC006080, AC003041, AC004659, AC009516, AF207955, AC005488, AL049576, AC006064, AL080243, AC006251, AC006160, AC002301, AC006597, AL080317, AC006132, AC004851, AC005049, AL133500, AC007676, AC003104, AC004261, AC003101, AC006241, and AL031594. |
| HHEQB17 | 2333 | 918056 | 1-408 | 15-422 | |
| HHEQR47 | 2334 | 841899 | 1-464 | 15-478 | |
| HHEQG21 | 2335 | 934684 | 1-457 | 15-471 | |
| HHEQG45 | 2336 | 717303 | 1-306 | 15-320 | |
| HHEQG52 | 2337 | 956214 | 1-191 | 15-205 | |
| HHEQG72 | 2338 | 922619 | 1-329 | 15-343 | |
| HHEQG75 | 2339 | 766960 | 1-387 | 15-401 | |
| HHEQG86 | 2340 | 784752 | 1-375 | 15-389 | Y17793. |
| HHEQH63 | 2341 | 744596 | 1-386 | 15-400 | |
| HHEQI07 | 2342 | 952416 | 1-227 | 15-241 | |
| HHEQI11 | 2343 | 966293 | 1-408 | 15-422 | T89011, and AL047171. |
| HHEQI82 | 2344 | 728596 | 1-370 | 15-384 | AA659367, and AA661891. |
| HHEQI89 | 2345 | 786607 | 1-173 | 15-187 | |
| HHEQK01 | 2346 | 871911 | 1-582 | 15-596 | AA489782, and AF129078. |
| HHEQO36 | 2347 | 707926 | 1-445 | 15-459 | |
| HHEQP38 | 2348 | 709076 | 1-394 | 15-408 | Z98256. |
| HHEQP83 | 2349 | 780397 | 1-676 | 15-690 | AA720645. |
| HHEQQ47 | 2350 | 699160 | 1-428 | 15-442 | AF104235. |
| HHEQS17 | 2351 | 662203 | 1-499 | 15-513 | |
| HHEQU09 | 2352 | 755007 | 1-451 | 15-465 | |
| HHEQV03 | 2353 | 923324 | 1-475 | 15-489 | Z27104, AA947563, and AI123214. |
| HHEQV39 | 2354 | 932851 | 1-873 | 15-887 | AA355773, and AA355926. |
| HHEQX60 | 2355 | 915561 | 1-453 | 15-467 | |
| HHEQY32 | 2356 | 698633 | 1-365 | 15-379 | AA353703. |
| HHERA17 | 2357 | 858239 | 1-257 | 15-271 | AL041364, AA581202, H22202, AA573189, AI623423, AI889612, AA130055, AI298936, AA688189, AA026119, AL046322, H82057, AA301758, and AL049795. |
| HHERB03 | 2358 | 933271 | 1-422 | 15-436 | |
| HHERB04 | 2359 | 854112 | 1-1070 | 15-1084 | AA102072, AI124666, AA136417, AF169548, and AC004099. |

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| HHIERN11 | 2360 | 966003 | 1 - 363 | 15 - 377 | |
| HHERO39 | 2361 | 858238 | 1 - 426 | 15 - 440 | |
| HHERO95 | 2362 | 928142 | 1 - 1324 | 15 - 1338 | AI761092, AW088116, AI660060, AA460070, AI823894, AI377047, AA833746, AW022132, AI660032, AI573194, AA938309, AA741093, AW294514, AA856722, AA459978, AI635527, AA948449, AA767492, AA311065, AW183379, AII67213, AA621378, and AL133101. |
| HHERQ04 | 2363 | 925697 | 1 - 504 | 15 - 518 | |
| HHERQ50 | 2364 | 858049 | 1 - 793 | 15 - 807 | AA151636, AA478851, AI018742, AI335888, AI268195, AA479950, AI436179, AI268216, AA360626, AW362452, and AA021655. |
| HHERU77 | 2365 | 934167 | 1 - 473 | 15 - 487 | AW276744. |
| HHIERV38 | 2366 | 933142 | 1 - 440 | 15 - 454 | |
| HHERX04 | 2367 | 925700 | 1 - 643 | 15 - 657 | AA749124, AW024899, AI738779, AW298129, AI936218, AI472304, AI418577, AI309755, AI081335, AI809820, AA016255, AA054132, AI024619, AA905716, H21932, AA256702, N79804, N77846, N77838, AI874019, AA872041, and AC004895. |
| HHESF07 | 2368 | 952214 | 1 - 588 | 15 - 602 | AI248073, AA235254, AI658612, and AA250935. |
| HHESG02 | 2369 | 918639 | 1 - 316 | 15 - 330 | Z73495. |
| HHESH33 | 2370 | 893701 | 1 - 482 | 15 - 496 | |
| HHESI92 | 2371 | 792431 | 1 - 241 | 15 - 255 | |
| HHESJ03 | 2372 | 922998 | 1 - 569 | 15 - 583 | |
| HHESK56 | 2373 | 779164 | 1 - 534 | 15 - 548 | |
| HHESN02 | 2374 | 918634 | 1 - 390 | 15 - 404 | AF085233, and AF169035. |
| HHESO94 | 2375 | 793390 | 1 - 607 | 15 - 621 | AF150222, and AF161351. |
| HHESP87 | 2376 | 858224 | 1 - 671 | 15 - 685 | AA598870. |
| HHEST60 | 2377 | 858220 | 1 - 300 | 15 - 314 | AL023584. |
| HHESU02 | 2378 | 918668 | 1 - 490 | 15 - 504 | AP000689, AC006312, Z84466, AL080243, AC005722, AF064861, Z83822, AF001549, AB026898, AL031311, Z84480, AL035081, AL096763, AC003071, AB003151, AC002310, AC005796, AC003101, AC005081, AC005049, AC004031, AP000499, Z82203, AL022336, AC004526, Z83847, and AC004448. |
| HHESU03 | 2379 | 923030 | 1 - 671 | 15 - 685 | AI929353, AA310170, and AW401881. |
| HHESU54 | 2380 | 926341 | 1 - 412 | 15 - 426 | |
| HHESU85 | 2381 | 783820 | 1 - 324 | 15 - 338 | AA804825, AA113301, AW264764, AI580548, AA130859, AA581238, AI805438, T66032, AA533703, AA578089, AW265073, AI963514, AW274078, AA494038, AA984263, AA630834, AA601318, AA341817, R42117, AA811489, AW402458, R64204, AL138271, AA486106, AA708021, AA069589, AA470544, AA059369, AA339011, R43218, AI057350, AI354862, AA628627, AA857296, AA814527, H46593, AW327868, AA584513, R15075, AA810200, AL009029, AC008134, AC006965, Z97181, AC004104, AP000018, AC004791, AC005881, Z97055, Z85996, U91321, AC005067, AL023284, AC005067, AC004895, AC006211, |

| | | | AC003042, AC008062, AC005620, AL021407, AL078472, AC002487, AL080245, AF038458, AF064858, Z83846, U52112, AC005184, AC007182, AF015720, AC005829, AC006050, AJ229041, AC007688, AC004752, AC004125, AC004934, AC003035, Z84814, AC005358, AL034417, Z98044, AC005598, AL109753, AL031665, AC006065, AC006120, AL009183, AL008729, Z93930, AC006454, AC005913, AC002300, AP000023, AC005666, AL133448, AP000511, U89337, AC005668, AC004381, AL008638, Z95115, AC005015, AL035457, AL096791, AI008720, AJ251973, AC004876, AC004938, Z83733, U95743, AC005736, AC004864, AC004887, AL049749, Z97353, AL022318, AL034549, AC004231, AC005102, AC003687, Z72006, AC004750, AC005820, AC006039, AC004816, AC004967, AF126403, AL035695, AL020995, AC010206, AC005177, AC005094, AC004806, AL117338, AC004962, AC008123, AC002302, AC007546, AC004991, AC003010, AC007993, AC005553, U07563, Z95114, AC007115, AL109984, AC006538, AC005224, AC005386, AP000216, AC004794, AC006040, AC016831, AC005295, AC007686, AC002351, AL034429, AB023054, AC007225, AC005220, AL031650, AC005831, AC007073, AC007157, AL096772, AP000265, AF015416, AC007773, Z82198, AL133445, AF130343, AC005808, AC005277, AC004659, AL049830, AL031767, AP000034, AP000101, AC009363, AC004551, AC005822, Z82189, AC004609, AC007193, AC007297, AC004693, AC006060, AC004551, AP000208, AP000130, AC006162, AL031681, and AC002347. | 1 - 511 |
| | | | AA569179, AA299351, AI679759, AW238495, AI246061, AI054090, AI620266, AI298079, AI185394, AA856866, AA434346, T08386, AI114494, AA582746, AA192293, AA657910, AA768179, T06292, AL039309, AL037856, AL042373, AA741301, AI251241, AA527109, AI630894, AI284543, AI254770, AI251944, W96277, AI251034, AI251203, AI251284, AW128881, AI590404, AI250552, R35259, AA020873, AA579399, H43183, AI479068, H16875, AW408767, H24957, AA502688, AA846923, D82321, F08214, T41134, AA744095, AA662614, F37201, AI249853, T05617, AW019964, AA736713, AI207728, AI285493, AA878407, AI223626, AW303098, AW341882, AI889579, AI345394, AA484892, AI445373, AI348780, AL038977, AI671077, AI143653, AL036909, AA654535, AA484298, AI973173, AA363957, AA020882, AI707744, AA687542, C17540, AI884861, AI636734, AI078409, AI110685, H90845, AA827383, AW079737, AI439676, AA353168, AW303822, AI421755, AI124779, F17537, AA295893, AA480486, AA295899, AA682536, AI863279, AA410771, AAR31919, H63220, AA469230, AA757426, AA714073, AA564256, AI678476, H58891, AI281401, AI860535, T65895, AA507637, AL137946, AI927261, AA244181, AW151549, AI619994, AI821641, AC006360, AC005084, AL049856, AC007655, AC005234, Z73900, AL122020, AL035458, AL132668, AC005768, AL096791, AL132641, AC004996, AC006317, AC006236, AL117338, AL078612, AC004820, AF205588, Z92844, AC005998, Z78022, AC004054, AC006343, AC005996, U80017, AC005993, AL117337, AC004815, AL021368, AC004382, AL078477, AL033525, AC005879, AB017602, AF029308, AC005050, AC004974, D83253, AC007537, U91319, AP000106, | 15 - 525 |
| HHESV46 | 2382 | 935074 | |

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|---|---|---|---|---|---|
| HHETA53 | 2383 | 858211 | 1-751 | 15-765 | AC011311, AL133445, AC004053, AC007731, AL009174, AC005500, AC005539, AC002565, AL023653, AC004905, AC008122, AL030095, Z54246, AC006987, AC007276, AC004605, AC018769, AC004485, AF126403, AC002480, AC005516, Z97181, AL024497, Z99571, AL078604, AC010205, AF001549, AC006453, AC005610, AL022319, AL117356, AP000279, AC007786, Z83820, AL022162, AC005908, AL049569, AL021396, AC006052, AL135879, AL121790, AP000038, AC004649, AB020869, AC006077, AC005915, AC006160, AC004158, AC002994, AI049650, AC007395, Z93928, AC000120, AI008583, AC006381, AC006572, AC005230, AC008069, AC006333, AC005094, U82672, AC006430, AC005488, AP000500, AC004134, AL109847, Z81369, AF107885, AF064866, AL079295, AC000090, AC005220, AC007444, AC007406, Z82194, AL136504, AL031427, AL008635, AC004955, AL133353, AC005410, AL034402, AL096712, AC007738, AP000301, AC004881, AC005272, AF111168, AF124730, AC004525, AC007238, AF039906, AC002301, AC006459, AC004001, AC005878, AC005095, AC007387, AL049776, AC008984, AC004950, AC006288, AF222686, AB026898, AC008079, AC008125, AC005826, AL136297, AL049777, AL035249, Z99289, AL022578, AC004916, AC006379, AC005049, AC005237, AC008179, AL022345, AP000045, Z82203, AC005752, AC007541, AL031672, AL118497, AL050337, AL022329, AC008015, AL118523, Z76735, AC004645, AC009542, AF130248, AC009330, AC004453, AC004712, AC008012, AC005035, AC004448, AC005823, AC002525, AL021578, AC006197, AL021918, AC006544, AC009464, AC007514, AF064865, AP000555, AC005033, AL049836, AC005576, AP001068, AL033504, AP001067, AC002303, AL137100, AC000395, AC005659, AC004692, AC004830, AL022717, Z99943, Z95327, Z99128, AL078603, AJ011930, U89335, Z69890, AC006374, AC003065, AL049833, AL008718, AC006373, AC006111, and AP001054. |
| HHETB42 | 2384 | 973127 | 1-218 | 15-232 | |
| HHETC50 | 2385 | 927000 | 1-368 | 15-382 | |
| HHETD13 | 2386 | 858218 | 1-634 | 15-648 | |
| HHETE34 | 2387 | 974392 | 1-719 | 15-733 | AA722372, AW440545, AI631119, AL038971, AL041706, AL046746, AA812281, AI110760, AA083046, T56253, AA410828, AW151713, N48230, AC048125, AA601157, AA633708, AW075511, AA359347, AA459749, AL135377, AL040382, AW245747, AA724333, AI963600, AW303196, AL119762, AI284640, AW301350, AI669615, AI963720, AI334443, AL119601, AL121235, AW274349, AW102811, AA564634, AI924251, AI791664, AW274346, AI270117, AI493236, AL046409, AI281881, AA503600, AW408707, AL037683, AL041690, AL038705, AA581903, AA478355, AA634889, AI956131, AW193265, AW021583, AI589230, N94311, AI368745, AI367371, AA584167, AI583283, AW238278, AL040921, AA580808, AA468022, AA579366, AI431303, AA806796, AW069625, AA623002, AA587604, AA507824, AW270270, AA491814, AW020992, AA372481, AA490183, AI732865, AA720702, AL046205, AI368256, |

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| AI350211, AW167374, AW438643, AA493708, AI919265, AA351056, AI612280, AI860020, AA714433, AA610491, AI708009, AA613227, AI085719, AI471481, AA521323, AI499938, AW405299, AA658362, AI355206, F36273, AI345518, AA488746, AW300625, AC004638, AC003602, AL080243, AC002549, AL121603, AC005527, AC004799, AC016025, AC006539, AC006312, AC002400, AC000085, AC006285, AI050341, AC004686, AC005565, AC005919, AC002126, AC005529, AC004019, Z81369, AF049895, AL022726, AC008372, Z86061, AC007688, AC004490, AC004987, AC002451, AL079295, AC007363, AC005412, AI133245, AC005829, AL022329, AC005295, AC007298, AC005250, AC005740, AC007406, AC004765, U73638, AF124523, AC002996, U95742, AC006544, AC009330, AC002310, U47924, 797054, AL022163, AP000553, AC002470, AC006208, AC004890, AC009247, AC006480, AC000358, U75285, AC005815, AC004967, AC006543, AC003958, AL031577, AL022316, AF207550, AC007666, AC000353, AC004963, AP000090, AC004861, AF001549, AL021391, AP000103, AC005037, AC007371, AL031681, AC002115, AP000557, AC006536, AI023284, Z85987, AC003693, AC008064, Z99916, AC007676, AL022326, AC007193, AC006948, AC010202, AC005632, AC005089, AC002404, AC002041, AL035089, AC002301, AC007546, AC004031, AC007565, AC006195, AC008062, AC007226, D87675, AF111169, AL022166, Z99774, AC005411, AC009516, AC008726, AC002429, AC007677, AC006449, AL096701, AL049776, D83253, AL023882, AI008726, AC002289, AC007421, AC006059, AC004472, AL031848, AL049539, AC005696, AJ003147, AL021878, AL023513, AC006965, AC008009, AL050318, AC006241, AC002456, AC000052, AC005335, AC007216, AC005763, AL049757, AC002059, Z98051, AL078593, AC005703, AC005839, AF088219, AC005562, AC007878, AL049709, AB020868, AC002064, AC002289, AC004979, AC006057, AC004854, AL049569, AC005940, Z69917, AL022722, AC003101, AC004703, AC005324, AC005067, AL023807, AL133396, AC004593, AC005520, AC006213, AC003029, AC007221, AC004931, AP000163, AC005822, Z84466, AL031785, AC004612, AL031733, AP000313, AF123462, AC006271, AC005844, AL109865, AL035460, AC003663, AC002994, AC006006, AC004025, AL139054, U82828, AC006960, AC004972, AP000252, AC003666, AC016831, AC002564, AC005913, AC006111, AL031276, 293017, AC010197, AC000025, AC004230, AL009172, AC005971, AC005531, AC005911, AC004087, AC005291, AL109758, AL031662, AL035072, AL021939, AC007055, Z83844, AL031281, AP000050, AC000118, AC005102, AC005409, AL031730, AC004149, AC004650, AC005242, AC004771, AL033527, AC007308, AC004526, AP001053, AL122023, AC005229, AC004895, AF118808, AJ006345, AC002991, AL023581, AC002350, AC005666, AL021578, Z86090, AC006001, AP000217, AP000134, AP000212, AC005484, AC003098, AL022400, AC009399, AC002302, AC009248, AP000476, AC006211, AP000117, AC010205, AL024507, and AC005907. | | | | | | |
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| HHETF07 | 2388 | 952218 | | 1 - 321 | | 15 - 335 |
| HHETF94 | 2389 | 793420 | | 1 - 424 | | 15 - 438 |

| HHETK07 | 2390 | 848748 | 1 - 1028 | 15 - 1042 | |
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| | | | | | AA181422, AA181363, AA192252, AA194285, AI355246, F31811, AI367551, AI636734, AI828721, AI049630, AW089950, AA535216, AA228442, AI923052, AA480486, AA469230, AI250552, AW162288, AI251034, AI751162, AI254770, AI284543, AI054090, F13749, AW023111, AW243817, AA525331, W45215, AA579278, AA654781, AI251284, AI251203, AI431434, AI249853, AI366180, AA584241, R83708, AI452836, AA553337, AA744272, AW301483, AA745524, AW303098, AA503019, AI753113, AI583106, F30310, AI360514, AI446478, F24745, AA714190, AW193493, AW089625, AA639155, AI709024, AA507837, AI537538, T41132, AI357976, AI609972, AI884383, AA489856, AA778580, R67701, AL037910, AA279919, AA654482, AI708005, AW274078, AI680547, AA570555, AA229988, AA599532, AI865807, T41164, AW243945, AI865988, AA326410, AI358089, AI580707, AI500552, AI246386, AW117704, AI560085, AI565084, AI597832, AI620992, AA493947, AI310464, AA297789, AA633799, AI370475, AA533408, AA302661, N74629, AW162697, AI696901, AW167154, AA111870, AA297670, T70299, AA947375, AA347382, AW337805, AW270768, AI446205, AI929796, AA580251, AA130623, AA630535, AW117723, AA601674, AI287921, AA604180, AL041375, AI696793, T40612, N57681, AA514020, T49184, AI885465, AI573009, AI608751, AA425924, F35684, AA102737, AA516320, AW268322, AA878140, AI054418, AI750125, AI816058, C18779, AA371410, AA633875, AI798521, AA862029, AA376358, AI065031, AW439724, AA323085, AA559290, AL039187, AA810837, AW304699, AL135643, H67064, AA558067, AA557770, AI049534, AI434653, R92998, AA847585, A65890, AC008273, AC002553, AA235329, AA632479, AA555232, AA569089, AA745588, AL050348, L44140, AL031319, AC004253, AL022320, AC005011, AL031230, AC005988, AC005777, AL031447, AC007292, AC007537, AP000553, AL133216, AL049836, AC005412, AC004149, AL031777, AC002425, AL035250, D28126, AC005920, AF001548, AL035450, AC002511, AF045555, AL133246, Z54246, AL031577, Z82244, AC004983, Z83826, AC000353, AL031311, AC005746, AC006449, AP000501, AL021977, AI133249, AJ012008, AC007792, AL031311, AC005746, AC006449, AP000501, AL021977, AI133249, AJ012008, AC005225, AC006474, AC007371, AC005037, AC004587, AC006277, Z83844, AC005839, Z82976, AL049776, AL022336, AC005081, AC005081, AC006544, AL031132, AL031291, AL079304, AC004034, U73169, AC005755, Z82215, Z95115, AC005231, AC004655, AC009946, AB023060, AC007546, AC007193, AD000833, D87008, D88268, Z81369, AL078593, AJ251973, Z99716, AC005694, D88270, AC005756, Z97206, AL034554, AC004859, AC005486, D87012, AL023575, AC003108, AC004973, AP000152, AL079295, AC006372, U80017, Z93784, AP000350, AC007690, AC005786, AP000555, AC002310, AC004815, AC005207, AC004703, AL008707, AC005520, AL031431, AC003070, AC005074, AC005089, AC007225, AB000877, AL008629, AF207550, AL021155, AC004821, AC007387, AL031186, AC002070, AC005695, AC005015, AF001550, AC005184, AC005484, AC002091, AC006441, AC007687, AP000011, Z75407, AC004933, AC004832, Z93023, AB023049, AL031295, AC002350, AC006511, AL022723, |

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|---|---|---|---|---|---|
| HHETM92 | 2391 | 790879 | 1 - 435 | 15 - 449 | AL031846, L81761, AC005288, AC006132, AF038458, AP000359, AJ236701, AL033521, AF109907, AL049793, AC004150, AL121658, AC010183, U47924, AC005768, AL049869, AJ246003, AL109952, AC004896, AB007869, Z95152, AC002420, AL022156, AL031683, AC004534, AL024474, AC001478, AC005209, AC004797, I34294, AP000271, AP000032, AC003692, AC004195, AP000402, AC005562, AC007993, AC006046, AL008726, AC008116, X60459, AC005901, AC005971, AC005776, AI096702, AC005527, Z79996, AC006312, AC003013, AL031588, AC004741, AC005355, AL008582, AP000510, AC000031, AP001065, AC004139, AJ011930, AB023048, AC006111, AL133353, AL021395, Z85987, AC002492, U73636, U96629, AL031427, Z82173, AC006487, AC007551, AL022316, AC007227, AP000031, AC004887, Z15025, AL096791, AL031597, AC011594, AC008134, AC002418, AC005214, AF047825, Z97056, AC004895, AC004491, AC006538, AP000509, AC005913, Z84480, Z54147, U53331, Z98752, AC005033, AC009247, AC005046, AL031005, AC004099, Z98052, AL031589, AC005187, AC000075, AC005529, AC004263, AC005318, AC004196, AC000381, AC004596, AC006026, AC000379, AC007384, AF196779, AL021939, and S42653. |
| HHETQ54 | 2392 | 908567 | 1 - 713 | 15 - 727 | AC006270. |
| HHETR21 | 2393 | 936252 | 1 - 706 | 15 - 720 | AI885183, AA903775, AI554613, AI291522, AI916978, AW135652, AA393862, and X79828. H25211, Z44055, AA452343, AA297470, AA366087, AA297673, AA135318, AW161368, AW402965, N46057, Z41875, R59956, AW005173, AA504590, H23102, AL042001, AL041998, and AI865194. |
| HHETR04 | 2394 | 793434 | 1 - 572 | 15 - 586 | AC005158. |
| HHETS04 | 2395 | 926997 | 1 - 1022 | 15 - 1036 | |
| HHETU20 | 2396 | 858206 | 1 - 456 | 15 - 470 | AC007225, AC006449, and Z77249. |
| HHETV35 | 2397 | 784894 | 1 - 210 | 15 - 224 | AL035079. |
| HHETX01 | 2398 | 915284 | 1 - 322 | 15 - 336 | AA310882. |
| HHETY79 | 2399 | 774171 | 1 - 366 | 15 - 380 | AA312734, W23120, AA976304, AA297895, H49170, R76772, R34930, AA356611, AA205378, AA281670, AA352713, AA662069, AA354224, AA521488, AA714210, AW167245, AA448152, D50918, AC004913, and AB023622. |
| HHEUA62 | 2400 | 965709 | 1 - 850 | 15 - 864 | AA132827, and AI905590. |
| HHEUC31 | 2401 | 795268 | 1 - 772 | 15 - 786 | AI624024, AA307816, and AB018268. |
| HHEUC84 | 2402 | 788954 | 1 - 675 | 15 - 689 | |
| HHEUE01 | 2403 | 915274 | 1 - 203 | 15 - 217 | |
| HHEUE86 | 2404 | 784879 | 1 - 719 | 15 - 733 | |
| HHEUE89 | 2405 | 786254 | 1 - 326 | 15 - 340 | R94055, and AL136295. |
| HHEUP02 | 2406 | 918655 | 1 - 605 | 15 - 619 | AL042433, AL134920, AL134902, AL134524, U46341, AW372827, AL119341, AL134528, AL134518, AL134533, and AR054110. |
| HHEUT33 | 2407 | 952043 | 1 - 293 | 15 - 307 | |

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|---|---|---|---|---|---|
| HHEUY42 | 2408 | 918029 | 1 - 167 | 15 - 181 | |
| HHEVI06 | 2409 | 933921 | 1 - 251 | 15 - 265 | AI560063, and AC005696. |
| HHEVL35 | 2410 | 965644 | 1 - 145 | 15 - 159 | |
| HHEVN07 | 2411 | 952041 | 1 - 350 | 15 - 364 | |
| HHEVR07 | 2412 | 952070 | 1 - 414 | 15 - 428 | |
| HHEVS63 | 2413 | 973213 | 1 - 564 | 15 - 578 | AL043039, AL043019, AW392670, AL119497, AL119401, AL043037, AL119457, AL043205, AL042978, AL042980, AI142132, AW372827, AL042544, AL119390, AL134902, AL043033, AL119355, AL042614, AL119341, AL119391, U46346, U46351, AW363220, AW384394, AI119439, U46349, AL134533, AL043029, AL119443, AL119396, AL134525, AL134524, AL042551, AL119319, AL134538, Z99396, AL119484, AL119324, U46350, U46347, AL119483, AL134536, AL119418, AL119363, AL043099, AL119444, AL043003, AR054110, AR066494, AB026436, A81671, AR069079, and AR060234. |
| HHEVS95 | 2414 | 957950 | 1 - 393 | 15 - 407 | |
| HHEVV64 | 2415 | 974520 | 1 - 630 | 15 - 644 | AW084328, AA525807, AA578621, T51832, AW023111, AA219349, AA805795, F24745, AW265688, A1192440, AA654482, H60738, AI433131, AI446259, F30158, AA808982, AA613966, AA639282, AA668587, AA609826, AA621865, AW245354, AI049709, AI635440, AA584655, AP001053, AL049872, AC007371, U47924, AC005484, AF064861, 783845, AL031291, AC003967, AC007283, AC002094, AC004686, AC007050, AC006443, AC005369, AC004257, AL109758, L78833, AC004832, Z98200, AC004460, AC005839, AL022721, AL022320, M87889, AL022318, AC006316, U73169, AC006211, AC004865, AC005088, AL024498, AC004890, AF031078, AC005081, AL109984, U96629, AF030876, AC005041, AC005588, AC005913, AF031108, AC008040, AC002128, AL121595, AC007314, AC006277, AC005971, AC005046, AF030453, AC004084, AC006088, AC004217, AL049869, AF043945, AC004750, AL031286, AC007637, AC004033, AC006501, AC005881, AL035587, AC005412, AC005288, AL034429, AC005348, AC006511, AC005568, AC005837, AL031282, AC018633, AC003101, AC003029, AC002544, AL008723, AC006115, U91326, AC006006, AC005015, AL135744, AC005666, Z85987, U91323, AC006275, Z82178, AL031588, AC006014, AC004517, AC005488, AC004813, AC007690, AC004771, AL021154, AC005049, AC005667, AP000476, AL109827, AL049776, AC007041, AL133245, AC007157, AC007766, AC002477, AL121603, AP000022, AC005180, AL031133, AC004134, AC002369, AL031584, AF196779, AL121655, AC005089, AC005874, AF134471, AC006165, AC005280, AC004673, AC005527, AC006026, AC004998, U63721, Z95331, AC006530, Z93096, AC002990, AC004953, Z86090, AL109967, AC006538, AL133243, AL035659, Z93659, AC005722, AC002395, AC000025, AC005914, AC006512, AC007546, AL049539, AC004821, AL021453, AC004167, AC003043, AC007057, AL133445, AC005216, AC005003, AF095725, AL118497, AC004253, AC006312, AC005887, AL133289, AC004129, AC003007, AL021578, AL022316, AC002554, AL022302, U91322, AC004242, AC009248, AC004067, AL050348, |

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| | | | | | AP000252, AC005924, AC006251, AC004475, AC004353, AC000353, AC004382, AC005082, AC004476, AC000045, AC003093, AC003689, Z93020, AP000230, AC004447, AC010205, AP000144, AC004019, AC006930, AL031685, AC005480, AC002059, Z83826, AI050306, Z98884, AC005409, AL022336, AL136295, M17262, AP000952, AC005730, AP000600, AC005919, AC005778, AC002365, AC004815, AC005632, AL096702, AC005726, AF111167, AC006449, AP000212, AP000134, AC004797, AC004668, AI096701, AL049743, AC003661, AC003098, AC005233, AC007686, AL021579, AP000359, AP000502, AL035405, AC006064, AC005324, AC016027, Z97055, AC006050, AC003663, AC007934, AL133448, AR036572, U91328, AC005011, AP000556, AI078581, AC016830, Z84469, and AC004674. |
| HHEWE44 | 2416 | 973219 | 1 - 722 | 15 - 736 | AL119444, AL119483, W01359, AL119418, AL134524, AC003037, AC007899, AI031681, AI021977, AL021707, AC005875, AC004967, AL034379, AC007216, U95742, AF109907, AL021453, AL034420, AC004000, AL034417, AL031432, AL022165, AC006287, AC005102, AC005746, AP000300, AC002059, and AC006468. |
| HHEWF40 | 2417 | 973234 | 1 - 799 | 15 - 813 | AL119484, AL079683, AI612032, AA654627, AL043009, AA381163, F23259, AW265197, F19258, AW277102, M62268, AA768409, AI205126, AA558697, AI003743, T51118, AA366820, AW074398, W60516, AA650244, AA515435, AA077817, AI204076, AA219909, AA626747, AI418164, AI635974, AI110770, F29989, AI561335, AA355602, AI284640, F36404, AA366035, F37223, AI961906, AI365988, AW023672, AW303876, AI610159, AI471481, AI061334, F24284, AI053672, H40538, H64560, AA680299, AA749364, F36273, AI792108, AA578141, AI287528, AI334443, AI358229, AI358343, AA350859, AI350211, AI435544, AI433187, AA317170, F37169, AI287284, F34511, T29360, AI963786, AW088058, AI345459, AI264743, AW339687, F28576, AA559290, AI336660, T16592, AA342901, AI053786, AA831388, AI569086, AI924251, AI446464, AA659083, AI635272, AA714595, W56200, AW406755, AA654968; AW193432, AA133986, AI249997, H73081, N71724, AI305547, AI144330, AW339568, AL138265, AW193265, AL041368, AA664535, AI887483, AW248523, AA341228, F32894, F35659, AI431303, AA542991, AI688846, AA340003, AW338869, AW008317, AI079910, AI423103, AW264973, AW407340, AA308806, AA491814, AA095511, AW406447, AI349874, AI359285, AA977743, AW022046, AA434484, AI046409, AI281903, AW419262, AW439558, AA916039, AI912322, AI914706, AL119691, T40338, AI125139, AI536555, F31799, AI963720, AA919037, AW406162, AA652057, AI246409, AI872421, AA484148, AA649642, AI341664, AL079645, AW269639, N71930, AA362700, AL120295, AI499094, AI557323, AA299115, H71429, AW248803, F35113, AI565245, AW069807, AI343137, AI951928, AA451612, AI148446, AW275674, AL138455, AA775230, AA483034, H16048, AI038279, AI017024, AI613280, AA663306, AI493546, AI064864, AW276827, H64777, AI251002, AL042856, AA252763, AI951889, AI929531, AA610491, Z98473, AW249224, AA714453, AI299050, AI344844, AI471543, AA557686, AA344161, W07122, AI830390, AI037914, AA557879, AL038785, F32705, R72458, AA134367, AI761471, AA299601, AI648558, AI340453, AW080134, |

AW069427, AI287651, AA340960, Z78022, AC007395, AC005069, AL022396, AL049759, AC004453, AL139054, AC006017, AC005244, AC005909, AF042484, AL031665, AP000517, Z97180, AL008626, AF207550, AF011889, AB023054, AC002072, AL034551, AL049550, AC006238, AC004186, AC005520, AC005221, AC002559, AL136501, AC007870, AL035588, AC002382, AJ251973, AC008975, AL008709, AL121754, AL022345, AI133371, AC006512, AF055066, AC004673, AF002223, AL080276, AP000519, AC006151, AP000088, AB023056, AL049765, AC004862, AC004829, AC002289, AF205588, AP000140, AL022170, AL121871, AC008394, AL050308, AC004025, AL034423, AL049836, AC006112, AC006381, AC006196, AL022726, AP000466, AC004381, AL021391, U95741, AP000263, AL009181, AC004955, AP000036, AL049594, AC006213, AP000100, AP000228, AC006560, AL031675, AC004984, AL117337, Z72006, AC008012, AB017652, AC002524, AC005538, AC003969, AB026898, AF130249, AC007024, AC005726, AC005233, AL035258, D87675, AC005949, Z82189, AL049696, AL035070, AB017653, AC004129, AC005008, AP000142, AC006362, Z84484, AL121838, AL049869, AL022067, AL021307, AL021918, AC007386, AL031178, AC006975, AC007051, AB014080, AP000514, AL031054, AC004206, AC005023, AC005920, AL022153, AC007968, AC007567, AC005252, AC018767, AL121757, AC005023, AL121652, AC005048, AI021329, Z92547, AC004901, AL022152, AC006427, AC003051, AC006111, AF121898, AC007540, AL031387, AC006080, AC008163, AC006572, AL050331, AC006203, AC002412, U91325, AC004861, AL024498, AL049690, AL022333, AC007286, AC005203, AC005203, AC002412, U91325, AC004861, AL024498, AL049690, AL049831, U95740, AL021407, AC005828, AL133396, AL031666, AL008721, AC003964, AC007539, AC005243, AC006376, AC007237, AF042091, AC004964, AL009172, AL121578, AC004042, AC047207, ACN04911, AC004596, AC005823, Z93928, AC004878, AC007461, AC007444, AL049742, AC003041, AC004468, AC007026, AL049610, AC006389, AC004503, AC004940, AF003627, AB020875, AL031769, AC007076, AC004817, AL049775, AC007263, AL022343, AP000011, AL109627, AL109627, AC006538, Z95400, AC006043, Z82203, AC004024, AC004849, AC008071, AL022316, AC004052, AL049613, AE000660, AC002331, AC004966, AL034424, AC002316, Z98949, AC007684, AC004098, AL034548, AC012384, AF111167, AC004918, AC006529, AL049777, AC006077, AP000053, AP000168, AP000121, M87918, and AL031291.

| HHEWL08 | 2418 | 957946 | 1 - 565 | 15 - 579 |
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| HHEWTS2 | 2419 | 858116 | 1 - 296 | 15 - 310 | AA457754, F29968, AA525753, AI718323, AI589230, AI860423, AI696955, AA581463, T71936, AA847704, H56721, AI345146, M77974, AI634601, AI439525, AA136897, T40612, H54340, F17312, AA460367, F30933, AI345566, AW272758, AW243817, AA230025, AI610012, AA468371, AI609974, AC006312, AC002476, AL022326, AP000036, AC006441, AC005013, AC004929, AC002347, AC005914, AF196971, AP000010, U93037, AC007731, AC005049, AC005015, AC006449, AC005500, AF139813, AC004228, AF002991, AC005081, U07000, AL021163, AC007845, AP000689, AL096791, AC016025, AC006930, AC005620, AP000501, AC006538, AC006285, AC006064, AC005859, AC005520, AC006241, AC007435, AC004216, AL049869, AL031277, AC007688, AL035423, AL022302, AC007298, AC005565, AL031427, AL133448, AC004032, AL133246, AC007542, AB003151, AL109628, Z93930, AC005667, AL121658, AC007546, AL049830, AL021918, AC007376, AL031670, AC006251, AC003982, AC002300, AC004991, AL121603, AC007263, AC002312, AC007773, AC005089, AC007690, AL033521, AL021391, AL049757, AC006057, AL008710, AC004678, AP000030, AC004671, AC004827, AC008372, AL009181, AC005102, AC004973, AC005102, AC004675, AL031054, AP000049, U80017, Z99716, AC004003, AC006023, AC002511, AC006211, AL121655, AC015853, AF088219, AC006511, AC005529, AC002511, AC005562, AC006013, U52112, AC002544, AP000311, AC006262, AL121653, AC121653, AC004703, AC007050, AC003689, AP000045, AC008044, |

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| HHEWU52 | 2420 | 935243 | 1 - 370 | 15 - 384 | AL132987, AC005531, AC005342, AF053356, AC005291, AC002263, AC002316, AC004895, AL034553, L78833, AF196779, AC004938, AL008721, AL031432, AL049775, AL035458, AE000658, AC003025, Z93017, AC004131, AF064861, AL034549, AL035086, AC005971, AC004230, AL031737, AC005694, AC005841, AC005899, AL034548, AL020095, AL133163, AC004834, AL009051, AC002418, AL033527, AL049610, AC016027, Z97053, AC007314, AF117829, AC007193, AC016830, AC004643, Z93244, AL034417, U85195, AP000031, AF031078, AI251973, AC005772, Z84469, AC005519, AC004383, AL035684, AC004019, AL034429, AC004593, AP000155, and AC005725. |
| HHEWU93 | 2421 | 973141 | 1 - 499 | 15 - 513 | |
| HHEWY63 | 2422 | 858114 | 1 - 402 | 15 - 416 | |
| HHEXD07 | 2423 | 951983 | 1 - 386 | 15 - 400 | T90576. |
| HHEXK51 | 2424 | 932911 | 1 - 441 | 15 - 455 | AA380899. |
| HHEXX06 | 2425 | 933858 | 1 - 267 | 15 - 281 | |
| HHEXY05 | 2426 | 920532 | 1 - 694 | 15 - 708 | |
| HHEYG35 | 2427 | 878225 | 1 - 509 | 15 - 523 | AC003007, and AC005632. |
| HHEYK30 | 2428 | 961960 | 1 - 481 | 15 - 495 | AW250651, AA205472, AA100098, AW250529, AA852703, AI215935, AA099468, AA502996, R55448, and AL050348. |
| HHEYK73 | 2429 | 847483 | 1 - 543 | 15 - 557 | AP000553, and AC009516. |
| HHEYP70 | 2430 | 861923 | 1 - 461 | 15 - 475 | AL040191, AI681518, AI692511, AA126434, W73242, AI741041, AA149414, AI796147, AI382171, AA716512, AA453874, AW406167, AI651251, AI189326, AW300691, AI087946, AI750752, AA678239, AI880169, AI670131, AA527704, AA489320, N41477, AA406606, AI298196, AI189518, N24031, AW193326, AI768820, AA431845, AW072591, AA768764, H40910, AA994953, AI651230, AI767999, AI831533, AW405466, AA577527, AA621254, AA595649, AA777665, AI039523, AA831340, AA676861, AA761298, AI278796, AI633506, C75076, AW440729, AI274990, T74612, AI274989, AI204199, AA027230, AA046211, AI499039, AI69869I, AA513167, AI769276, AI247923, AA730209, AA431442, H51604, R73370, H40951, AA714946, AA889500, AW207415, AI868412, AW023485, AW080541, AW089033, AI143409, AA113933, AA149300, AI214812, W73297, R85535, AA347274, AI264766, H44524, AA773391, AB002368, and AC003010. |
| HHEYQ78 | 2431 | 963321 | 1 - 297 | 15 - 311 | AB002390. |
| HHEYV03 | 2432 | 922104 | 1 - 459 | 15 - 473 | N43748. |
| HHEYZ12 | 2433 | 968939 | 1 - 228 | 15 - 242 | |
| HHEZA83 | 2434 | 973236 | 1 - 792 | 15 - 806 | AW392670, AL119457, AL043033, AL119355, AL134542, AL119483, U46349, AL134538, AL119319, Z99396, U46351, AL119363, AL119324, AW372827, U46346, AW363220, U46350, U46347, AW384394, AL119443, AL119439, AL119484, AL119391, AL119444, AL119497, |

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| HHEZJ38 | 2435 | 860048 | 1 - 510 | 15 - 524 | AL043029, AL119401, AL042984, AL119341, AL042965, AL134533, AL119418, U46341, AL134536, AL119335, AL134902, AL042542, AL119399, AL119464, AL037205, AL134518, AL134525, AL042544, AL119496, AL134532, AL042975, AI142132, U46345, AL042450, AL043011, AL043019, AL042614, AL043003, AL042551, AB026436, AR054110, AR066494, AR060234, and A81671. |
| HHEZP45 | 2436 | 952047 | 1 - 187 | 15 - 201 | W26290. |
| HHEZP54 | 2437 | 952367 | 1 - 798 | 15 - 812 | Z73359. |
| HHFFHP14 | 2438 | 960049 | 1 - 805 | 15 - 819 | AI806206. |
| HILAA18 | 2439 | 657314 | 1 - 579 | 15 - 593 | AA381084, AA381071, and AA380862. |
| HILBD61 | 2440 | 504130 | 1 - 516 | 15 - 530 | AA352037. |
| HILCD94 | 2441 | 887182 | 1 - 809 | 15 - 823 | AA352188. |
| HJAAH06 | 2442 | 960647 | 1 - 631 | 15 - 645 | AI823665, AI680854, AA723790, AW195801, AW137032, AW439945, AI924857, AA687329, AA743184, AA764896, W93389, and AA353212. |
| HJAAM73 | 2443 | 530476 | 1 - 451 | 15 - 465 | AW163254, AA314521, AA354171, AA361131, AA337563, AA354364, AA330348, and AF113538. |
| HJAAT23 | 2444 | 530472 | 1 - 436 | 15 - 450 | AA354447, AI909885, AI940079, AI909850, and AI909873. |
| HJAAU52 | 2445 | 530473 | 1 - 541 | 15 - 555 | AA354714, W86159, and AI440432. |
| HJAAU57 | 2446 | 661275 | 1 - 293 | 15 - 307 | AA169182, AA354783, AA852481, AB028893, Z64482, and Z64483. AA354792, AA354785, H67171, AA309969, R91175, AA502207, AI743721, R76258, AC004762, AC006511, AC005747, AC004821, AC000386, AC003101, AL031259, AC004382, AC007040, AI109798, Z85987, AC004843, Z99128, U73167, U90094, AP000300, AL031848, AC007055, AC005546, AP000045, AP000113, AL035587, AF205588, AP000962, AC002306, Z84469, AC004791, and AL049591. |
| HJAAV29 | 2447 | 669278 | 1 - 300 | 15 - 314 | AA354798. |
| HJAAV82 | 2448 | 738993 | 1 - 669 | 15 - 683 | H38110, AA354829, and AA242784. |
| HJAAW39 | 2449 | 530468 | 1 - 417 | 15 - 431 | AA354854. |
| HJAAW48 | 2450 | 530641 | 1 - 391 | 15 - 405 | AA354890, F00006, AA629836, AI446336, AC005288, AC002418, AL035405, AC003684, AL049631, AC006088, AC005800, AC004814, AL133445, AC000353, AC004386, AP000493, AC004966, AC004883, AL021154, AC004813, AL034417, AC003098, AL022476, AC006449, AC006511, AC006312, AL034429, AC005229, AC004491, AC007774, AL050307, AC006501, AF111168, Z98742, Z98036, AF190465, AC006538, AC004699, AC006026, AL096701, AC004967, AF053356, AC008115, Z99716, AL050318, AC005696, AC004821, AC004812, Z98051, and Z68756. |
| HJABB37 | 2451 | 530467 | 1 - 421 | 15 - 435 | AA355113, AW068073, AA425026, and AA157625. |
| HJABC27 | 2452 | 669059 | 1 - 367 | 15 - 381 | AA355129, AA287703, R05710, T83234, AB023172, and AF143869. |
| HJABH14 | 2453 | 530463 | 1 - 310 | 15 - 324 | AA310688, and AA355321. |

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|---|---|---|---|---|---|
| HJABJ06 | 2454 | 954589 | 1 - 475 | 15 - 489 | AA309609, and AL023806. |
| HJABP04 | 2455 | 925557 | 1 - 493 | 15 - 507 | AA309924, |
| HJABV44 | 2456 | 871824 | 1 - 556 | 15 - 570 | AA310251, AA831350, AA302870, AA811673, AI076729, H67854, AA601376, C14014, AI869406, AI133355, Z93241, AC007308, AC006162, AP000500, AC007160, AC006115, L78833, AL049793, AC005081, AC006011, AL034548, Z97056, AC005224, AC006121, AL050318, AC004150, AL022311, AC005015, AC005632, AP000503, AC006021, AP000356, AL050312, AC005562, AC004099, AF165926, AC006211, AC002044, AL031311, AC005971, AC008012, AL031255, AC002470, AC007283, AC004106, AC004757, AC001228, AP000692, AP000133, AP000211, AP000030, AC005726, AL049829, AF196971, AC005529, AP000252, AC005305, AC002115, AC006487, AL020997, AF001548, U95090, Z93016, AL049694, Z97054, AC004686, AC005800, AC005902, AL031390, AL031297, AC006111, AP000251, AC004087, AF053356, AL049757, Z94801, AC007227, Z83844, AL096701, AL021391, AF205588, AC010077, AB023049, Z93023, AC004655, AC004882, AC005874, AF134471, AL031767, AL109914, AL109839, AC007350, AL031668, AF055066, AF134726, AC002306, Z94056, AC001052, AC004659, AC004966, ZR3838, AC004685, Z97989, AC005822, AC005755, U62293, Z98200, AC005722, AC004156, Z99570, AB020871, AC007664, AC007537, AC004148, Z98048, AC008018, AC007021, AL109984, AL022238, AC005049, Z83732, AC004983, AC006449, AC005538, AC007193, AP000311, AC002347, AC007057, AL133448, AL031281, Z92542, AC005057, AP000049, AL022323, AC005962, AC004910, AC006014, AL022316, AC004816, AC005011, AC004699, AC005180, AC007934, AL024507, AF030453, AC004998, AF003529, AL139054, U62317, AF037338, AC009247, AB020870, AL096791, AC005911, AF196779, AC005484, AC007684, AC004797, AL031778, AB023048, AC003110, AL031597, AL035695, AL008734, and AP000088. |
| HJABV57 | 2457 | 839528 | 1 - 661 | 15 - 675 | AA310405, A30438, I25947, U46128, L40401, AR040601, and AJ133038. |
| HJABW28 | 2458 | 958721 | 1 - 368 | 15 - 382 | AA310349, H63791, H63751, AA488739, AC004236, AC004466, and AA249375. |
| HJABX33 | 2459 | 966611 | 1 - 425 | 15 - 439 | H64513, and AA310354. |
| HJABY68 | 2460 | 861548 | 1 - 483 | 15 - 497 | AA310646, AA354853, AW405591, AW402676, N76224, N42680, and AI290663. |
| HJABZ52 | 2461 | 857454 | 1 - 438 | 15 - 452 | AA310693, H83593, AA236501, AF150367, AL035563, Z61190, Z60182, and AF161557. |
| HJACB80 | 2462 | 746411 | 1 - 545 | 15 - 559 | AI094227, W92159, AA825437, R02713, AW205546, T86217, AA885954, W86575, AA904189, W86709, F17491, AA310834, and AC008014. |
| HJACC59 | 2463 | 534867 | 1 - 505 | 15 - 519 | AA310956, AA355111, W79349, D81026, C15076, C14389, AW377671, D80522, D59467, D80164, D59502, D81030, D80166, D80193, D80195, D80391, D59627, D59787, D80133, D59275, D80038, D80022, D80212, D59619, D80210, D80240, D50979, D80196, D51213, D80227, AA305409, D80219, D58283, D51022, D59859, C14331, AW384820, D50995, AW384832, D51423, D51799, D80253, D80251, D80043, D80045, AA305578, D51060, D80269, AA309971, D80248, C06015, D80258, D80188, D59927, D59610, D57483, D80378, D80366, T03269, D80268, AW178986, D59889, D80024, AA514188, D80439, AW177440, T11417, |

| HJACC67 | 2464 | 518222 | 1 - 343 | 15 - 357 | D80241, AA514186, AW178893, D80064, D80247, C14077, D80302, D80157, AW360811, C14014, D59373, D51103, AW177501, AW177511, AW179328, AW177734, C14227, AW369651, AW178759, D80014, AW378532, D51759, AW378533, AW375405, AW360844, AW352117, D81111, AW178906, AW377676, AW179019, AW178775, D58101, T03116, D51250, AW178762, AW352158, AW366296, AW360817, D59503, AW177505, AW179020, AW375406, AW378534, AW352171, AW179332, AW377672, AW179023, AW178905, AW177731, T02974, AW178754, AW179024, AW352170, AI525923, T48593, AW360841, C14407, AW378528, D45260, AW296085, AW178909, AW177456, C14298, AW179004, F13647, C03092, AW178907, AW178908, AW179018, AW178971, AW378540, AW352120, AI557751, AA809122, H67854, H67866, AW179017, AW378539, AW179009, AW179012, AW178980, D59695, AW177733, AI525917, AW360834, AA380490, D80168, AW367950, AW178914, AW178774, AW378543, D59317, AI905856, D59551, AW178911, AW378525, AI535686, D58246, D52291, AW179013, D80228, C14973, C14344, D51221, AW178781, AW352163, AI557774, D59474, AI525920, AW177728, AA514184, Z30160, T03048, AI525227, Z21582, C05763, D80949, AI525242, AI535959, C14046, H67858, AI525925, AI525235, AI525215, D51079, D45273, C13958, AI525912, AA285331, AW378542, AI525903, D31458, C16955, T02868, Z33452, AI525237, AF058696, A84916, AJ132110, A62300, A62298, AR018138, AR008278, A82595, AF036905, AB028859, AR060385, AF036906, AJ223280, AB002449, X67155, Y17188, D26022, A25909, I50126, I50132, I50128, I50133, Y12724, A67220, D89785, A78862, D34614, A45456, AR060138, AR016514, I82448, D88547, A26615, AR052274, I14842, A94995, AR066488, Y09669, A43192, A43190, AR038669, AR008443, AR066487, X82626, A30438, AR025207, AR054175, Y17187, D50010, A63261, AR008277, AR008281, AR008408, AR062872, A70867, AR016691, AR016690, U46128, I79511, A64136, A68321, AR060133, D13509, X68127, and AF123263. |

Second column:

| AA309853, C14014, D59859, D59889, C15076, D51423, D80253, D59467, I167854, D80166, D80212, D51799, D59619, D80210, D80240, D57483, D80164, D80024, D58283, D80188, D80195, D59275, D80219, D81030, D80391, D80043, D80227, D59502, D80366, D80196, D80022, D59927, D59610, D80038, D80269, D80193, AA305409, D59787, C1433I, D50979, C14429, D50995, D80241, C14389, T03269, D80378, D80045, D51060, C75259, D80134, AW377671, AW178893, AI913895, D80268, AW378532, AI114875, D80251, D52291, AW369651, D51022, AW178775, D51250, D58253, W89152, D59695, D80949, F13647, AW179328, C14298, AW352158, D80064, D51079, AW178762, AA305578, D80168, D81026, D80248, AA594198, C14407, AW378540, D80522, AW178762, AA745570, AA514188, AW177501, AW375405, AW352117, AW514186, D80133, AW360811, AI905856, D51097, H67866, AW375405, AW360844, D80132, R84431, D88547, A62298, A84916, A62300, AJ132110, AR018138, X67155, Y17188, A67220, D89785, A78862, D26022, A25909, D34614, AL049795, AF181897, AF068862, AC004612, AF049895, AC002070, I82448, AR008278, AF058696, AC004922, AC002350, AR025207, AL022319, AC004477, X82626, AL021026, |

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|---|---|---|---|---|---|
| HJACE47 | 2465 | 589114 | 1 - 298 | 15 - 312 | AR028859, AC007790, AC007227, AC005912, U95739, AB004907, U91319, AC006077, AC000004, AL121852, AC004253, and AC006026. AA311100, and AA355655. |
| HJACE79 | 2466 | 666768 | 1 - 461 | 15 - 475 | AA311091, AA354762, D58283, D80043, D80268, C14389, D80188, D57483, D80022, D80166, D80253, D80195, D80391, D51423, D59619, D81030, D59859, D80210, D51799, D80240, D80196, D80212, D80227, D50979, D59502, D59927, D80219, D59275, D50995, D59889, D80038, D80193, D80269, D59787, D59610, D80366, D51060, D80024, D80164, D80241, D80522, D59467, D80378, C15076, D80045, D81026, AW177440, AW177501, AW177511, C14014, AW377671, AA305578, C14331, AW352117, AA514188, AA305409, D51022, D80248, T03269, AW178893, AW352120, D80247, AW360811, D80251, D80133, AW179328, T03116, D58253, AW375405, AW360844, AW378532, AW178906, AW179024, AW177505, AW178775, D80132, AW366296, D51213, AW360817, D51250, D80302, AW375406, T11417, AW352158, AW378534, AW352171, AW178762, AW179332, AW377672, AW377676, AW179023, AW178905, D80439, D80134, F13647, AW178754, AW177731, AW352170, AW360841, AW179020, AW178909, AW177456, D52291, AW178907, AW179019, AW179018, AW178971, AW179004, D51079, D59627, D80168, AW178781, AW179017, D80014, AW178980, AW179329, C14227, AW179012, AW352174, D81111, AW177733, AW378528, AW178908, D51103, AW367967, C06015, D80157, AW178774, AW378540, Z21582, AW178983, D51759, C14407, AW179009, AW178914, AW378543, AW378525, C14298, D80064, AI905856, AW352163, AW178911, AW177728, T48593, D58246, D59503, AA285331, AA809122, T02974, AW360834, AW178986, D58101, D45260, D80258, AW177734, C03092, I167866, AW367950, AI525923, AI557751, AW369651, H67854, D60010, AW378533, AW378539, D51097, D59474, C14344, D45273, D51231, AI525917, D59317, AW179013, AW178759, C14973, T03048, AI525227, D51221, C14046, AI525920, AA514184, AI557774, AI535961, AI535686, C16955, H67858, D59551, Z33452, Z30160, AI525912, AI525235, AI525242, AW378542, AI525925, AI525927, AI525215, C05763, AL031005, A62300, AJ132110, A84916, A62298, AR018138, AB028859, AF058696, AR008278, X67155, Y17188, D26022, A25909, A67220, D89785, A78862, D34614, Y12724, A82595, D88547, A94995, AB002449, AR060385, X82626, AR016808, AR008443, AR025207, I50132, I50126, I50128, I50133, AR060138, AR066488, AR016514, A45456, A26615, AR052274, AR066490, Y09669, A43192, A43190, AR038669, AR066487, I18367, AR054175, A30438, X68127, I14842, AB012117, D50010, Y17187, A63261, A70867, AR008277, AR008281, AR008408, A85396, D88507, AR066482, A44171, AR062872, A85477, AR016691, AR016690, U46128, I19525, A86792, X93549, D13509, A64136, A68321, AR060133, I79511, AF123263, and AR008382. |
| HJACF14 | 2467 | 659329 | 1 - 635 | 15 - 649 | AA311125. |
| HJACF47 | 2468 | 507156 | 1 - 910 | 15 - 924 | W94499, AA311178, AA568770, AI376314, and AL117328. |
| HJACH86 | 2469 | 784634 | 1 - 258 | 15 - 272 | AA311347, and AC002310. |

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|---|---|---|---|---|
| HJADD60 | 2470 | 1 - 321 | 15 - 335 | AA713522, AA687156, AA459001, AA250811, and Z98946. |
| HJBAB01 | 2471 | 1 - 292 | 15 - 306 | AA355427. |
| HJBAD34 | 2472 | 1 - 121 | 15 - 135 | AA355455, AA355516, and AC005156. |
| HJBAG75 | 2473 | 1 - 266 | 15 - 280 | AA355499. |
| HJBAT26 | 2474 | 1 - 269 | 15 - 283 | AA356012, AI969579, AA913841, AA846697, AI224479, AA505890, AI360528, and AA765212. |
| HJBAX43 | 2475 | 1 - 290 | 15 - 304 | AA356074, and AC000065. |
| HJBBD13 | 2476 | 1 - 198 | 15 - 212 | AA356340. |
| HJBCP53 | 2477 | 1 - 414 | 15 - 428 | AA306860, AA312440, AI478642, D59627, D80168, D59695, D52291, T03048, D45273, D51213, C16955, C15076, D59275, C14298, AA305578, D80251, D80949, D51799, D51079, D80269, D57483, D59467, D80227, D80366, D59889, D80253, D81030, D80164, D50979, D59610, D80024, D80212, D80195, D80188, D80219, D59502, C14339, C14331, C14407, D80045, D50995, AW360780, D58283, D51022, D59859, D80022, AA305409, D80166, D51423, D59619, D80210, D80391, D80240, D80043, D59787, D80064, D80038, D80378, D81026, D80241, D80193, D59927, D80228, C14227, AA514188, D81111, Z33452, D80258, D59503, D80014, D58246, D58101, D80133, AI535686, D51060, AI557774, D80248, T11417, AW377669, D52059, T02974, F13647, C14014, D80522, Z21582, Z30160, C06015, C14077, AA514186, AW377661, H67854, H67866, D59551, D80268, AI525216, AI525228, N66429, AI557751, D60214, D80302, AA809122, AI525969, D59317, C14344, D80439, C03092, D80157, C13958, C14973, D59474, T03116, D80247, C04682, T02868, AI525978, D51103, AA514184, AI525238, D51759, D51221, AI525242, AI525903, AI525923, C14002, AI525920, H67858, D31458, AI525227, D45260, C05763, AI525237, AI525235, AI525912, AI525215, AI535961, AA305720, AI525917, AC003682, AJ132110, A84916, AR016808, AB028859, X64588, A62300, A62298, AR018138, AR008278, AB010386, AF058696, I79511, AR060385, AB019242, U37689, I81198, AB002449, I14842, A82595, A47134, AR054175, AR008277, AR008281, AR060382, and Z82022. |
| HJBDB28 | 2478 | 1 - 199 | 15 - 213 | AA306009. |
| HJBDG57 | 2479 | 1 - 454 | 15 - 468 | AA306410, AW245824, AA313296, AA306336, AW245551, AA525315, AA355857, AA382974, AA313343, AA158977, AA360010, AA158998, AA312340, AA341482, AW403283, AA355541, AJ010058, Y18418, AF099084, AF070735, AB012122, AF100694, AB001581, and AB002406. |
| HJBDL14 | 2480 | 1 - 565 | 15 - 579 | AA306649, N76633, Z40822, and Z97989. |
| HJKSB86 | 2481 | 1 - 336 | 15 - 350 | |
| HJPAH35 | 2482 | 1 - 312 | 15 - 326 | AA356898. |
| HJPAT51 | 2483 | 1 - 335 | 15 - 349 | Z25932, and Z25922. |
| HKBAC12 | 2484 | 1 - 743 | 15 - 757 | AI940546, AI859744, AI459866, AI671077, AW236342, AA372106, AW265654, AA024517, AW440976, F23274, F34826, AW406162, F34511, AA614010, AI291124, AL079869, AA634855, |

AI291268, N54179, AA025083, AI537030, AA663482, AA501600, F33121, AA626678,
AA834799, AW188484, AA127486, AA318652, AI205126, AA327572, AI282310, AI886365,
AL041706, AA666059, AA054106, AA077817, AA372881, W32993, AA515224, AA715606,
AA987962, AA593060, AI301273, H64777, AI287485, T40077, AA347927, W47444, AA654322,
AA381747, AA570416, AI341548, AI039451, N43757, AI133164, H43183, H39611, AA528441,
AA180964, AA215929, H04867, AI190960, AI718446, AI815583, AA565700, AI678392,
AA586655, AI110770, AA347930, AA450199, AL041103, AA641368, AA641103, AI816537, AI339440,
AI282832, AA351845, AA504951, AI921649, AI635274, AA723017, AL138065, AW028353,
AI376100, D29019, AA745410, AI049649, AI865905, AI921296, AW029038, AA177061,
AA507991, AA243959, AW368401, AA359958, AI824562, F36273, AI821722, AW074059,
AA533408, AI962050, AI356904, AI732162, AI564284, AI499094, AI802526, AI873916,
AI821172, AI982634, AI370475, AI049722, U34879, AF207550, AC005071, AC006241,
AI035071, AC004659, U91326, AP000255, AC007057, Z99943, AL049872, Z85987, AC005358,
Z93017, AL049793, AC004815, AL008629, AP000213, AL022326, Z83822,
AP000135, AC007191, AL031428, AC004106, AD000092, AL021937, AP000031, AI049757,
AC004922, AC002404, AF010238, AL033518, AC009247, Z54334, AC006111, AC005037,
AC005041, AC005144, AL049776, AC005932, AL022238, AL022163, Z92542, AC007263,
AC004526, AC005520, D87012, AC004834, AL031662, AI023284, AC002543, AC006571,
Y11107, AL035072, AC005066, AL009181, AL035405, AC005695, AC003101, AC004825,
AC004151, AC006130, AL049636, AC005940, AL031668, AC007055, AC004941, AP000553,
AC002350, AC005328, AC005988, AC004801, U47924, AC005542, AC005789, AC008040,
AC005527, AL022302, AC005696, AC002310, AC016025, AC005564, AF196970, AC002455,
AC005565, AC005049, AC006965, AL050338, AC005759, Z93930, AL078581, Z84721,
AC003043, AL034553, AC005666, AC007226, AC005193, AC004821, AC005529, AC007666,
AC002096, AL022158, AP000517, Z93241, AC005944, AF002993, AC005740, AC002073,
AC000353, AC002431, AP000555, AC004224, AC004802, AC004647, AC004841, AL133382,
AP001054, AP000504, AP000275, AC006026, AC006050, AC002425, AL132987, AL023575,
AL049869, L05367, AC004996, AC006285, AC004915, AL031295, AL133297, AC005261,
AL021154, AL034429, AB008681, AP000134, AP000212, AP000030, AC004771, AL035422,
AC005225, AL022313, AL035587, D88268, AC005015, AP000350, AC000003, AC004777,
AB023054, AP000105, AP000037, AP000045, AP000113, AF165926, L39891, AF095901,
AC004638, AL008715, AC006942, AC005412, U95742, AC007421, AF108083, AL021707,
AC005081, AL031846, AL096701, AC005153, AC006597, AP000349, AC004671, AL133448,
AC005089, AC005682, AP000556, AC007151, AC005899, AF196971, AF118808, AC007216,
AC004531, Z83836, AP000509, AC004890, AC005764, Z95116, Z69651, AC006048, AC006064,
AC005353, AL031848, AL035420, AC005874, AF134471, AC007436, U91321, AC006538,
AC002115, AC009946, AL035423, Z97989, AL109627, Z82211, Z98883, AF181896, D16561,

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|---|---|---|---|---|
| HKBAQ43 | 2485 | 934251 | 1 - 44 | 15 - 58 | AL031589, AC003035, AL049833, AC007156, AC007371, AC004087, AC004130, AL109628, AL021392, AL031293, AC010170, AC000052, Z95704, AL020997, Z97054, AC005730, AP000272, Z86090, AL031667, AC009784, Z93096, AL008582, AC007193, AC008044, U95740, AC005206, AC004257, Z97352, AC004918, AC005755, AL034418, AL022311, AC005486, Z69917, AL031289, AC004263, AC006211, AC004019, AL031276, and AL035045. |
| HKBAT27 | 2486 | 963724 | 1 - 766 | 15 - 780 | T07417. |
| HLADA25 | 2487 | 791845 | 1 - 428 | 15 - 442 | AA159634. |
| IILADA89 | 2488 | 786490 | 1 - 471 | 15 - 485 | AA259081, and AA256010. |
| HLCDB78 | 2489 | 760896 | 1 - 374 | 15 - 388 | |
| HLEAO21 | 2490 | 531287 | 1 - 95 | 15 - 109 | |
| HLEDB91 | 2491 | 787578 | 1 - 109 | 15 - 123 | AA701968, AI038071, AI913968, AA478730, AA479434, and AC000123. |
| HLKDB22 | 2492 | 766876 | 1 - 837 | 15 - 851 | AA127898, and AA127851. |
| HLKDC49 | 2493 | 722400 | 1 - 783 | 15 - 797 | |
| HLLCD11 | 2494 | 967337 | 1 - 322 | 15 - 336 | |
| HLMAC43 | 2495 | 799766 | 1 - 368 | 15 - 382 | |
| HLMAE45 | 2496 | 783886 | 1 - 309 | 15 - 323 | N71728. |
| HLMAE62 | 2497 | 796676 | 1 - 163 | 15 - 177 | |
| HLMAE83 | 2498 | 530107 | 1 - 297 | 15 - 311 | |
| HLMAH45 | 2499 | 954125 | 1 - 532 | 15 - 546 | H04096, H04118, AI085270, AI348611, H03415, H03398, H87153, AI184354, and AW382616. |
| HLMAII60 | 2500 | 856858 | 1 - 108 | 15 - 122 | |
| HLMAJ54 | 2501 | 811183 | 1 - 362 | 15 - 376 | AI972605, AI825634, AA291745, AA281084, AA836598, AI301258, AW207800, AI468330, AI559377, AI423842, AW138405, AA398529, AA428226, AW137882, AW149488, AI277002, AW135764, AI630822, AI802000, AW027943, AA746502, AI479965, AW207230, AI436232, AI299005, AI992316, AI277010, AI805270, AI819704, AA477763, AI333133, AI091828, AI018332, AI369454, N95248, AW134617, AI017173, AA535795, AW274817, AW137677, AW203971, AA293668, AW140143, AI970870, AW184019, AA526926, AA831623, AI589653, AA745853, AI670914, AI468159, AI221290, AA304437, AW139897, H97046, AA724268, AI247557, AA737067, AA293000, AA706959, N78408, AF007887, and AC007041. |
| HLMAJ84 | 2502 | 615300 | 1 - 296 | 15 - 310 | |
| HLMAN25 | 2503 | 677519 | 1 - 153 | 15 - 167 | |
| HLMAU11 | 2504 | 954571 | 1 - 286 | 15 - 300 | |
| HLMAU43 | 2505 | 856884 | 1 - 136 | 15 - 150 | |
| HLMAU70 | 2506 | 732665 | 1 - 388 | 15 - 402 | |
| HLMAV62 | 2507 | 671905 | 1 - 126 | 15 - 140 | AC002073. |
| HLMAZ06 | 2508 | 960557 | 1 - 428 | 15 - 442 | AA262581, H77920, AI479768, AA810033, AI440530, AA584862, C15362, AI110760, |

| | | | | | Accessions |
|---|---|---|---|---|---|
| HLMAZ14 | 2509 | 932679 | 1 - 249 | 15 - 263 | AW385729, AC002300, AC003684, AL021878, AC005546, AL132712, Z95331, AC006581, AC009464, AC007387, and AC006398. |
| HLMAZ72 | 2510 | 821500 | 1 - 592 | 15 - 606 | AI762175. AI821467, AI694977, AA230143, AC006480, Z83838, Z81370, AL022324, AC007227, AC005057, Z98950, AC006054, AF045555, AC005668, AC006285, AC007917, AP000704, AC005081, AC005821, AL049869, AC002395, AL031662, AC002449, AP000689, AC004185, AC002563, L29074, AC006039, AC000052, AC016025, L78810, U52112, AF088219, AC004019, AF152365, AP000509, Z85996, AC004150, AL050338, AC009044, AC004000, AC002059, AC003077, AF064866, AL020993, and AC004628. |
| HLMAZ91 | 2511 | 920216 | 1 - 239 | 15 - 253 | Z97352. |
| HLMBB25 | 2512 | 792549 | 1 - 242 | 15 - 256 | AA012851, H86413, AA019024, and H86637. |
| HLMBB43 | 2513 | 530611 | 1 - 343 | 15 - 357 | AC020663. |
| HLMBB56 | 2514 | 968209 | 1 - 366 | 15 - 380 | |
| HLMBB77 | 2515 | 799744 | 1 - 331 | 15 - 345 | AA219006, F08248, AI053911, AI933714, AW149313, AA846876, AI056177, AA297666, AI537772, AI494539, AI870197, AI636730, AA410788, C15060, AL037632, AA838190, F12561, N35602, AA127426, AW020088, T07039, AA308716, AA584378, AA621381, AI524360, AA961035, AA588001, AW148507, AA541423, AA213959, AA515457, AW275510, AA575911, AA580808, AA828042, AA747778, AL045808, AL046156, AI791913, AA501649, AW341978, AI792133, AI821714, AW149156, H07953, AW419262, AA630672, AI133297, AW179306, AW270343, H71429, AA954924, AA829036, AI344995, AI311276, AA493975, AA478355, AI925579, AA508359, T92321, AW235497, AI499588, AA878409, AL138182, AI287475, AA487621, T74524, AI311927, AL079645, AA493708, AA714276, AA613232, AI223700, AA228778, AA488746, AW023865, AA827231, AW274349, AI687343, F13808, AW378532, AA457070, AA086368, AA663461, AA326139, AA484267, AA372481, AA659360, AA503119, AA436774, AW303196, AA828749, AI648410, AL042927, AA502991, AA745507, AI250281, AW179305, AI282511, AI341571, H73550, AA436782, AA456578, AA522642, AA903253, AI873990, AA469400, AI284640, AI754567, AL035847, AI755214, AA827215, AA355379, AA847702, AA137013, AA658362, AA309257, AI745151, AI431240, H12071, AA380354, AI619436, AA515905, AL046409, AA683082, AL041373, AW408729, AA378690, AA508809, AA745406, AI821785, AA446657, H18914, AA833896, AA533463, AA833875, AA767963, AA508104, AA371482, AA557883, AL036037, AA469451, AA207033, AW196064, AA564865, AL041526, AI678368, AA526856, AA501852, AI791150, AW301350, AI818231, AA463590, AW020340, AI720058, AI040342, AA715814, N23504, AW172999, AI733856, AA732253, AA749235, AA610219, AI678785, AL048925, AW022655, AA568754, AI292257, AI377161, AI345891, AA788901, AA644090, AA531079, R89542, AA620467, AA630860, AA581123, AA502860, AW250905, AI149478, F25733, AI732677, AI281881, AA846907, AW130962, AB029885, U62317, AP000211, AP000133, AC006213, AC005778, AC006144, AC007298, |

| | | | | | Accession numbers |
|---|---|---|---|---|---|
| HLMBB80 | 2516 | 950730 | 1 - 355 | 15 - 369 | AC004935, AF053356, AC002357, AL109798, AC002119, AL049776, AC005231, X55448, AL109984, AF031078, AC003072, AL031289, AF030876, AL050306, AC005332, AC057701, AC004838, AC005081, AC005808, AC004167, AC004486, AL049647, Z99716, AL031005, AF196970, AC005348, AL031597, AC005971, AC008064, AP000694, AC007934, AC004813, AC007151, AL031589, AC010170, AC020663, AC002299, AC002470, AC005065, AC005736, AL031652, AL050341, AF129756, AC016025, AC005913, AC002565, Z83822, AC007666, AF165926, AP000251, AC007558, Z85987, AL049758, AC005924, AC004671, AC005399, Z84466, AC000052, AC004525, AP000501, AL050318, AL035413, AF000660, Z82249, AL050332, AF096876, AP000030, AC004999, AC006226, AC004019, AC005071, AL049570, AF115549, AC005181, AB020873, AC000073, AC000085, AC004590, AC005527, AP000556, AP000085, U07000, AC006531, AC007057, AC006581, AC003006, AC004825, AC008989, AC007458, AC016027, AC004787, AC005003, AL033392, AL034553, AC005702, AC004945, AF152364, AL121653, AC005037, AC005514, X74107, AF165147, AC004616, AC002464, U67829, AC006195, AC003988, AC004706, AL049760, AL049557, L44140, U80017, AC002504, Z98750, AC007537, AC005695, AC000353, AJ246003, AC007162, AL049565, AP000344, AL139054, AC005529, AC016830, AC006211, AC007055, AP000065, AB017602, AC005280, AC004160, AC004057, AL008718, AC008012, AL031767, AF093117, AC000039, U91325, AC007073, AC005066, AC008101, AC012599, AL133399, AP000049, AC011718, AC007285, AC008132, AC007664, AC004963, AC005342, AC005031, AL031294, AC003101, AC006050, A58551, AC005089, AC008079, U00921, AC009247, Y14768, AP000505, AC002492, Z98050, AC005899, AC003098, AL121658, AL080232, Y07848, AC007564, Z54146, AC006367, AC004069, AP000311, AL133246, AL035410, AC006045, AC000035, AC007279, AC000070, AC000086, AC008967, AC004465, AL031780, Z98742, AC006011, AL031708, X75335, AC005075, AC004382, AL035252, AC002455, AC005222, AD000813, AL117328, AC000065, AC005180, AL033377, AL034554, AL121877, AC005988, AC007253, AC005102, Z99943, Z83818, AC012099, AC000119, AC006111, Z81369, AC005324, AL021977, AC004947, AL035072, AL024509, AL023803, U93163, AL022330, AC006205, AC005185, Z99496, U52112, AC004025, AC004032, AL049828, AC005907, AC009399, and Z96243. |
| HLMBF68 | 2517 | 753614 | 1 - 551 | 15 - 565 | AA548350, and AL035209. |
| HLMBQ04 | 2518 | 615621 | 1 - 430 | 15 - 444 | |
| HLMBQ77 | 2519 | 954969 | 1 - 726 | 15 - 740 | AA287609, AW305191, and AA309915. |
| HLMBU64 | 2520 | 577608 | 1 - 228 | 15 - 242 | |
| HLMBU82 | 2521 | 799755 | 1 - 331 | 15 - 345 | AL035413. |
| HLMBV11 | 2522 | 967669 | 1 - 442 | 15 - 456 | AA383383, and AC009509. |

| HLMBV14 | 2523 | 682023 | 1 - 396 | 15 - 410 | |
|---|---|---|---|---|---|
| | | | | | AI471481, AA317973, AW088202, AA350859, AA650244, AI679379, AI284640, AI688846, AI446464, AA469451, AI251002, AA228420, AL041368, AI679888, AW264973, AI286264, T07451, AL046409, H63607, AI339850, AW440836, AW274349, AW131034, AW193432, AI918421, AI962050, AI273185, AA826303, AI619997, AW029038, AI929531, AW236342, AW419262, AA515128, AI890923, AW166815, AA886584, AA659083, AL040130, AA515051, F36273, AI610159, AW162049, AI824562, AL042420, F29989, AA977743, AW303196, AI431303, AA713815, AW301350, AA483068, AA364456, AL043721, AW193265, AI904894, AI537955, AI133636, AI567674, AI873916, AA594145, AA598824, AI625244, AF150222, AI679782, AA190613, AW088058, AA365347, AI133164, AI341664, AL206674, AA664535, AI278997, AI281697, AI350211, AL038785, AA229785, F18974, AI205126, AI608626; AA077817, AI653886, AI334443, AI053672, AI064864, H64777, AI613280, AA133986, AW055226, AA243452, AI469172, H88666, AI312149, AI830390, N25296, AI628288, AI282832, AA044863, AL119391, AI049722, AI951889, AW028400, AI287528, AA318652, AI017024, AW276827, AA177061, AI917271, N29933, AI286356, AA252763, C06458, AL138265, AW406447, AI537030, AI270117, AI951928, AI345654, AA021367, AI281903, AA385100, AA515224, F37169, AI289067, AI291124, AA634146, AW276435, AA771811, AI287485, AI821356, AI375710, AI340453, AA515435, AI291268, AL041412, AL041690, AA745410, AI358571, F32654, AA377730, AI301273, AA468131, AI168185, AI144330, AI110770, H39611, AW261871, AC003971, AL021368, AL031387, AL109985, AC000004, AF117829, AC007999, AL132994, AC002564, AL049830, AC004859, Z75741, AJ006996, AC004594, AC006430, AL031224, AC010170, AL035458, AL023284, AC005999, AL035416, AC006160, AL117356, AC003954, Z96074, AC004459, AL031286, AC005694, AP000705, AL096829, AL121578, AL035422, AL035446, Z84719, AL109759, AL022397, AL121871, AC006511, AL021397, Z98255, U91326, AL049777, AC005529, AC006479, AF029308, AC006238, AL008708, AC007073, AC008268, AC006459, U89335, AC004819, AC004677, AC006044, Z97205, AC005527, AC005832, AL096769, U70984, AC005844, AL109622, AC005191, AL009172, AP000519, AC004592, AL136297, AC006251, AC007051, AP000014, AL049709, AC006020, AB023056, AC003075, AL121823, AL035687, Z77249, AP000152, AP000011, AL109807, AC007546, AL008719, AC006525, AL022160, Z74696, AL035067, AC002544, AP000515, AL031733, AF064857, AC002457, AL023580, AC004864, Z84814, AC000073, AL023582, AF049895, AC005084, AP000473, AL096767, Z98946, AL117351, AL109984, AL023582, AC003015, AC004702, AL021026, Z98200, AL031734, AL033403, AC006256, AP000307, AL050305, AC004769, AC008149, AL110505, AB000882, AC006417, AL109653, Z73986, AC005539, AC007750, AL132800, U69730, Y10196, AC006946, AF109076, AC003029, AF172277, AP000080, AC007214, AC002381, AC006374, AL031391, AL109837, AC002531, AC003045, AL135746, AC007115, AL022310, AC006249, AL049873, AI239322, AL021877, AC006040, AL022319, AL136363, AL031782, AC005863, AC005909, AC004979, AC004842, |

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|---|---|---|---|---|---|
| HLMBRV24 | 2524 | 825595 | 1-232 | 15-246 | AC007106, AC012085, Z78022, AF017732, Z95124, AC002554, AL050348, AC004912, AC004049, Z99716, AC002044, AC009721, AL049835, Z78021, AL008629, Z82900, Z98884, AJ010598, AC006002, AC005323, AI035696, AF222685, AC004908, AI031670, AC005728, AC006432, AC006515, AP000115, Z95327, AC004984, AP000455, Z97198, AL096707, AL009051, AC009233, AC004020, AL078644, AC005969, AC004866, AC006383, AL022328, AC002451, AF070718, AC004547, AL023578, AC009891, AF003627, AC004384, AL033525, AL031116, AC006565, U91327, AC005216, Z83843, AC005029, AL031785, AC007065, AC006029, AC004531, AC006367, AL133512, AC009405, AC007671, Z98941, AC005993, AC005703, AC004930, AL031285, AL035079, AL121757, AC021092, AL035604, AF001905, AC000119, Y18000, AC000120, AC004055, AP000081, AC008067, Z93928, AL117258, AC008015, AC007380, AC007687, AC004199, AC005532, AP000704, and AC008109. |
| HLMBV72 | 2525 | 688069 | 1-295 | 15-309 | AW009940, AI394293, AI082857, AA227673, AW207417, AA491391, N99896, AA491389, AA227560, AI000839, AA361942, and AF156884. |
| HLMBW11 | 2526 | 950728 | 1-925 | 15-939 | AW409578. |
| HLMBX06 | 2527 | 954576 | 1-397 | 15-411 | AC007539. |
| HLMBX19 | 2528 | 879667 | 1-233 | 15-247 | |
| HLMBY16 | 2529 | 531053 | 1-193 | 15-207 | |
| HLMBZ31 | 2530 | 967640 | 1-270 | 15-284 | AC003070, and AL135783. |
| HLMBZ47 | 2531 | 577605 | 1-348 | 15-362 | |
| HLMBZ73 | 2532 | 531401 | 1-209 | 15-223 | R61738, AL117647, AB023195, and AL117518. |
| HLMCA13 | 2533 | 790952 | 1-398 | 15-412 | |
| HLMCA22 | 2534 | 529185 | 1-257 | 15-271 | AA719251, and AC005839. |
| HLMCJ32 | 2535 | 799767 | 1-337 | 15-351 | |
| HLMCJ64 | 2536 | 739397 | 1-314 | 15-328 | |
| HLMCJ66 | 2537 | 707231 | 1-83 | 15-97 | AA192733. |
| HLMCK45 | 2538 | 698342 | 1-268 | 15-282 | |
| HLMCL50 | 2539 | 921041 | 1-179 | 15-193 | |
| HLMCL93 | 2540 | 799699 | 1-620 | 15-634 | AC005696, AC006536, AC004500, AC004589, AL096773, AC007023, AC007057, and AL132712. |
| HLMCT06 | 2541 | 954615 | 1-378 | 15-392 | |
| HLMCT15 | 2542 | 507212 | 1-244 | 15-258 | AL035086. |
| HLMCT24 | 2543 | 921543 | 1-231 | 15-245 | |
| HLMCT79 | 2544 | 916590 | 1-344 | 15-358 | AW268314, AA767276, AI032114, F18098, AC007993, AC008085, AC006543, AC006544, AC005697, AC004686, AC005632, AC005730, AP000152, AP000011, AC009542, AC009330, AC005606, Z83840, AC002094, U91319, AC016026, AL023096, and AC002454. |

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|---|---|---|---|---|---|
| HLMCT93 | 2545 | 888976 | 1 - 336 | 15 - 350 | |
| HLMDE76 | 2546 | 529184 | 1 - 92 | 15 - 106 | |
| HLMDF04 | 2547 | 694910 | 1 - 53 | 15 - 67 | |
| HLMDF14 | 2548 | 799739 | 1 - 369 | 15 - 383 | |
| HLMDF52 | 2549 | 571415 | 1 - 170 | 15 - 184 | |
| HLMDH54 | 2550 | 527128 | 1 - 495 | 15 - 509 | Z82206. |
| HLMDH78 | 2551 | 532741 | 1 - 249 | 15 - 263 | H28779, AI865182, and AL136295. |
| HLMDJ37 | 2552 | 577239 | 1 - 418 | 15 - 432 | AL096768, AC002312, and AC005800. |
| HLMDJ48 | 2553 | 720893 | 1 - 342 | 15 - 356 | |
| HLMDN83 | 2554 | 799742 | 1 - 340 | 15 - 354 | |
| HLMDO02 | 2555 | 920859 | 1 - 235 | 15 - 249 | |
| HLMDO18 | 2556 | 527896 | 1 - 136 | 15 - 150 | AL096755. |
| HLMDO61 | 2557 | 584982 | 1 - 141 | 15 - 155 | |
| HLMDO65 | 2558 | 742749 | 1 - 456 | 15 - 470 | AA312110, T62666, H06759, W37108, W40387, AI620464, AI911142, R12100, W76480, W45377, Z4551R, AA315859, and AF190465. |
| HLMDP35 | 2559 | 535500 | 1 - 247 | 15 - 261 | AA131317, AW250536, AA456441, AA301053, AA301052, and D83782. |
| HLMDQ37 | 2560 | 531232 | 1 - 126 | 15 - 140 | Z83844. |
| HLMDQ40 | 2561 | 531234 | 1 - 188 | 15 - 202 | |
| HLMDQ60 | 2562 | 920837 | 1 - 368 | 15 - 382 | R89560, AA377325, H73561, AA550959, N70472, AA225100, R34070, AA298647, AA458573, AI683547, AA225028, AA063115, AW151247, N63897, T07878, AI889108, AI696343, AA632447, AA559241, N71619, AA502571, H62923, T03576, AA669711, AL024498, AL021707, AC005971, AC004491, AL022721, AC003080, Z85987, AC004967, AL022313, AC007421, U91323, AC006153, AC006014, AC005231, AC005089, Z84480, AC007226, AC005488, AL135744, AP000113, AC006088, AF047825, AC005081, AL022165, Z94801, AC007216, AC004955, AC004890, Z83844, AC007225, AL022320, AC004963, AC004893, AC006512, AC004938, AC005920, Z97630, AC006241, AF124523, AC004223, AC008040, U91326, AC004929, Z98044, AL035413, AC005071, Z98051, AC007676, AL096701, Z98742, AC005057, AP000359, AC005184, AC002404, AB023049, Z85986, AC004000, AC002395, AF001549, AC005342, Z84487, Z99716, AC004859, AC007546, AP000557, AC002544, AL031311, AC005288, AL031289, AC005808, AC004895, AL023575, AC002470, AC004216, AC006285, AC004999, AL109627, Z86090, AC003029, AP000692, Z92542, AF031078, AC004841, AC005102, AC003043, AC002314, AC006077, AP000556, AL034423, AC006538, AC004883, AL022311, AL008718, AC005305, AC002094, AF030876, AC005412, AC005409, AC006160, AL034420, AF111168, AF001548, AB003151, AC007551, AL035415, AC004167, AP000689, AC005015, AC005632, AC005520, Z93023, AL050307, AC008372, U78027, AL035659, AF165926, AC005914, U07563, AL034429, AL050341, AC007182, Z98200, |

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| | | | | | AC005229, AF196779, AC006312, AC005907, AL031295, AC003663, U62293, AC009248, AL049760, AL022316, AC002312, AC022517, AC002350, AL133371, AC004383, AC004099, AC005095, AL031281, U82828, AC006050, L78810, AL035667, AP000512, Z95114, U95743, AF109907, AC006039, AL022476, AC007358, Z83840, AC002347, AC006468, AI132712, AC002316, AL035422, AC007690, AC005899, AC000159, AC007051, Z97181, AL031846, AL109952, AC007450, AC016027, AL109628, AC006111, AC005225, AC002563, AC005696, AC005736, and AB014078. |
| HLMDR16 | 2563 | 530103 | 1 - 113 | 15 - 127 | |
| HLMDR33 | 2564 | 959707 | 1 - 416 | 15 - 430 | |
| HLMDR70 | 2565 | 531235 | 1 - 94 | 15 - 108 | |
| HLMDT17 | 2566 | 531231 | 1 - 210 | 15 - 224 | AL050337. |
| HLMDU04 | 2567 | 571393 | 1 - 281 | 15 - 295 | |
| HLMDU07 | 2568 | 930471 | 1 - 456 | 15 - 470 | AI654933. |
| HLMDU17 | 2569 | 528040 | 1 - 219 | 15 - 233 | AL080243. |
| HLMDU43 | 2570 | 575607 | 1 - 359 | 15 - 373 | AJ337315, AI492017, AI565658, AI565657, AI651781, AI591214, AI565667, and AL022316. |
| HLMDU54 | 2571 | 856877 | 1 - 320 | 15 - 334 | Z74023, and AF172244. |
| HLMDU71 | 2572 | 531228 | 1 - 316 | 15 - 330 | |
| HLMDU96 | 2573 | 799729 | 1 - 309 | 15 - 323 | |
| HLMDV96 | 2574 | 934543 | 1 - 813 | 15 - 827 | AI824014, and T79467. |
| HLMDW28 | 2575 | 531230 | 1 - 293 | 15 - 307 | |
| HLMDW58 | 2576 | 799749 | 1 - 282 | 15 - 296 | |
| HLMDX46 | 2577 | 523771 | 1 - 306 | 15 - 320 | |
| HLMDX59 | 2578 | 739523 | 1 - 404 | 15 - 418 | AA666254, R96738, R35404, AI571161, AA584484, AA740297, AA657778, AW089952, AA297844, C05714, H60313, AA587995, AI266003, H51835, H58666, N80546, AI682665, AI382324, T61514, AL118980, AI886056, F00818, AW079664, AI814739, AA603530, AA826081, AA515457, AI865807, AW068316, AA608751, AI872513, R07267, AA639946, AI289941, AI289942, AI955697, AA693484, AL049273, AL135744, AC003109, AC006238, AJ246003, AC007537, AC005736, AC005520, AL049757, AC005015, AC007057, AL049872, AJ010598, AL031291, AC006480, U91325, Z81314, AF187320, AL049748, AL034429, AC005210, AC007899, AF121781, AL121658, AL031670, D86995, AC002430, AC016025, AL021154, AL035249, AC007384, Z97056, AP000269, AP000032, AP000103, AC006064, AC005368, AC006088, AC007731, AC005971, AC005500, AC006026, AL050348, AC005859, AC020997, AC005914, AC006449, AC002511, AC002369, AP000347, AC002470, AC005513, AL023694, AL133448, AL020993, AL031803, Z94057, Z85986, AF047825, AC004383, AC005569, U91321, AL121655, AP000558, AC006080, AC001228, AF001549, AF111168, AP000350, U62293, AL031281, AL109827, AC007327, AC007308, AC005820, Z98941, |

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| HLMDX71 | 2579 | 799758 | 1 - 356 | 15 - 370 | AC005695, AC007546, AF001550, AL008582, AL022165, AC006112, AC000134, AC004228, Z84480, AC002477, AP000555, AC005839, AC008585, AB023048, AC002492, AC007686, AC002549, AC004882, Z97053, AL096763, AC007845, AC003682, AC008149, AL031659, AC004531, AC007766, AC006539, AL049745, AL096791, AC004876, AL031311, AC002045, AC005730, AC009516, AL121653, AC005826, AL109627, Z97630, AL022726, AL031431, AL049539, AC004896, AC006441, AL035086, AC005829, AC003043, AC002472, AF196779, AL023553, AC004782, AC005412, AC006130, AL022097, Z86090, AC005899, AC006430, Z69715, AC007999, AC007372, AC004821, AF207550, AC005195, AP000348, AC008984, AC005225, AL080242, AC006930, AC004598, AC005377, AL049837, Z46936, AP000355, AC005529, AC004929, U47924, AJ003147, AC005295, AC005531, U85195, AP000134, AL109758, AL050318, AC004643, Z69713, Z83841, AL049843, AE000658, AC004386, AL031685, AC002407, AC004686, AC005969, AC007096, AC006077, AC003006, Z98885, U07563, AL021578, AC005363, AC005519, Z70289, AC007096, AC002316, Z93930, AB023051, AL035443, AL109963, AC007262, AC004253, AC003101. |
| HLMDY24 | 2580 | 531219 | 1 - 408 | 15 - 422 | AA336841, and AL080172. |
| HLMDY48 | 2581 | 666518 | 1 - 118 | 15 - 132 | AC002400. |
| HLMDY56 | 2582 | 518410 | 1 - 92 | 15 - 106 | |
| HLMFA56 | 2583 | 730947 | 1 - 285 | 15 - 299 | |
| HLMFA72 | 2584 | 531359 | 1 - 316 | 15 - 330 | AC002299. |
| HLMFB58 | 2585 | 577643 | 1 - 352 | 15 - 366 | |
| HLMFD75 | 2586 | 799682 | 1 - 524 | 15 - 538 | |
| ;LMFG58 | 2587 | 573130 | 1 - 344 | 15 - 358 | |
| HLMFG66 | 2588 | 676040 | 1 - 435 | 15 - 449 | |
| HLMFH74 | 2589 | 671941 | 1 - 423 | 15 - 437 | |
| HLMFI89 | 2590 | 526929 | 1 - 185 | 15 - 199 | |
| HLMFK45 | 2591 | 531222 | 1 - 253 | 15 - 267 | |
| HLMFK63 | 2592 | 888660 | 1 - 574 | 15 - 588 | AA305578, AW366296, AW375405, AW177440, D59859, AW360811, D81030, AW377671, AA305409, AW178893, AI905856, D80314, C14389, AW178906, AW179328, AW375406, AW378534, AW179332, D58283, AW377672, AW179023, AW178905, D80022, C14331, D80166, D80195, D80193, D59927, D59467, D51423, D59619, D80210, D51799, D80391, D80164, D59275, D80240, D80253, D80043, D59787, D80227, D59502, AA514186, AW378532, T03269, D81026, D80269, C14014, D80212, D80366, D51060, D80196, D80188, D51022, D80248, D50979, D80219, D80522, D50995, AW352170, AW378528, AW178762, D80268, D80038, C15076, AW377676, AW352171, D57483, AI535850, AW177731, D80439, D59889, D80133, AW178907, D80045, AW179019, AW179024, D80247, AA514188, D80302, T48593, AW367967, |

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| HLMFK70 | 2593 | 856861 | 1-187 | 15-201 | AW179020, AW178775, AW178980, AW177733, AW178908, D80132, D80134, D51097, D58253, D51103, AR008278, D88547, Y12724, X82626, A84916, A67220, D89785, A62300, A62298, Y17188, AB028859, A78862, D34614, A94995, D26022, AJ132110, AR018138, X67155, AF058696, A25909, AR008443, I50126, I50132, I50128, I50133, AR066488, AR025207, A82595, AR016514, D50010, D13509, AR060138, A45456, I18367, A26615, AR052274, Y09669, AR060385, AB002449, AR066487, AB012117, A43192, A43190, AR038669, A30438, AR008408, AR066490, and AR060133. |
| HLMFK92 | 2594 | 571369 | 1-361 | 15-375 | AC005486. |
| HLMFL71 | 2595 | 526928 | 1-354 | 15-368 | AW361623, AI986246, AA535516, AW128941, AW337206, C16928, and C02317. |
| HLMFN24 | 2596 | 781780 | 1-313 | 15-327 | AA150787, AA147514, AC006255, AR026676, AC003695, AC002091, AL050034, and AF083068. |
| HLMFN68 | 2597 | 799751 | 1-392 | 15-406 | |
| HLMFR49 | 2598 | 842045 | 1-165 | 15-179 | |
| HLMFR72 | 2599 | 799709 | 1-356 | 15-370 | AW027339, and AA812373. |
| HLMFU09 | 2600 | 909666 | 1-372 | 15-386 | AA004442. |
| HLMFU13 | 2601 | 657283 | 1-289 | 15-303 | AL133246. |
| HLMFU39 | 2602 | 856872 | 1-326 | 15-340 | |
| HLMFU52 | 2603 | 727197 | 1-319 | 15-333 | |
| HLMFIJ90 | 2604 | 699667 | 1-323 | 15-337 | |
| HLMFW19 | 2605 | 534799 | 1-302 | 15-316 | |
| HLMGK40 | 2606 | 531355 | 1-337 | 15-351 | AA668863. |
| HLMGK50 | 2607 | 927675 | 1-289 | 15-303 | |
| HLMGP66 | 2608 | 799725 | 1-326 | 15-340 | |
| HLMGP96 | 2609 | 531225 | 1-167 | 15-181 | |
| HLMGY13 | 2610 | 921457 | 1-280 | 15-294 | R98835, N52276, AA165353, AA583579, AA730488, AW085542, AA583568, AW270429, AA682889, AW270351, AI360504, AA052973, W42587, AL036070, AA322542, AW051819, H48413, AA363003, AL048275, T40550, F00564, T39390, AA470567, C15362, T30418, AI268019, N72170, R95840, AC005081, AC005015, AC007114, AL031259, AC007200, AC007687, AL136168, AC000120, AC005920, AL109809, AL132987, AC007225, AL008718, U95739, AF029308, AC004750, Z93930, Z83840, AC002466, AL022313, AC006011, AC002312, AC007051, AC005089, AC007919, AL049780, AC007055, AC005180, and AC005924. |
| HLMGZ09 | 2611 | 625638 | 1-290 | 15-304 | AA205292, and AC005180. |
| HLMGZ33 | 2612 | 805813 | 1-295 | 15-309 | AA938180. |
| HLMHD65 | 2613 | 799736 | 1-342 | 15-356 | AL022331. |
| HLMHG83 | 2614 | 799770 | 1-383 | 15-397 | |

| Name | ID | | | | Accession |
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| HLMHG84 | 2615 | 572412 | 1-99 | 15-113 | AC006117. |
| HLMHH39 | 2616 | 823450 | 1-479 | 15-493 | D87432. |
| HLMHH40 | 2617 | 878117 | 1-325 | 15-339 | |
| HLMHH57 | 2618 | 714813 | 1-441 | 15-455 | H44968, AI422305, AI554649, AI433337, AI250867, AI160234, AA503975, RS0669, AI672302, AI870048, AW051623, W88425, AW363795, AB022524, AJ012652, and AB012162. |
| HLMHK16 | 2619 | 571414 | 1-317 | 15-331 | |
| HLMHK58 | 2620 | 799782 | 1-437 | 15-451 | |
| HLMHK61 | 2621 | 856848 | 1-342 | 15-356 | AC002301. |
| HLMHK62 | 2622 | 579101 | 1-193 | 15-207 | AA700441. |
| HLMHI60 | 2623 | 778481 | 1-220 | 15-234 | |
| HLMHM63 | 2624 | 578838 | 1-219 | 15-233 | AA765146. |
| HLMHN21 | 2625 | 516580 | 1-404 | 15-418 | AA285377, AA283300, AW404274, and W24845. |
| HLMHN27 | 2626 | 856846 | 1-318 | 15-332 | AI344280, and AW274081. |
| HLMHN31 | 2627 | 925730 | 1-1073 | 15-1087 | AA809335, AA836164, AA972108, AA765694, AA836103, AI364926, AA485705, AA485839, AI357107, AI702527, AW084056, AI310575, AI340533, AA693331, AA127565, AA001397, AI334893, AA669025, X80340, M96857, U86379, AL137479, Y10655, AF068229, AF091084, AL137267, AL137558, AF093119, AL110225, AL080126, and X57961. |
| HLMHN37 | 2628 | 723081 | 1-339 | 15-353 | |
| HLMHN45 | 2629 | 668906 | 1-256 | 15-270 | AC005600. |
| HLMHO11 | 2630 | 964945 | 1-125 | 15-139 | |
| HLMHO21 | 2631 | 799772 | 1-224 | 15-238 | |
| HLMHO33 | 2632 | 799756 | 1-313 | 15-327 | |
| HLMHP67 | 2633 | 967636 | 1-343 | 15-357 | |
| HLMHP74 | 2634 | 953956 | 1-281 | 15-295 | AA730448, AI174535, AI674840, T90861, AC004257, AF107258, AC003029, Z95116, AC005764, AC008015, AC004491, AL080274, AL033525, Z98044, AC005803, Z73979, AC000353, AL034376, D86993, AL035608, AC004560, AC004876, AC003035, AC005523, AC005529, AL049569, AL078463, AC002350, AL050318, AC004983, Z97054, AC007637, AL049712, AC016025, AC005553, AC005722, AC002558, AL109758, AF196779, AC006511, AC007278, AP000555, AC003101, Z99128, AC000379, AL133445, AC004659, AL080243, AP000038, and AP000106. |
| HLMHR25 | 2635 | 920711 | 1-297 | 15-311 | |
| HLMHR55 | 2636 | 825530 | 1-204 | 15-218 | |
| HLMHS31 | 2637 | 752375 | 1-308 | 15-322 | AB028953. |
| HLMHS41 | 2638 | 574741 | 1-219 | 15-233 | |
| HLMHS66 | 2639 | 574742 | 1-582 | 15-596 | AA234939, AI016356, AI742982, AI089004, AA236782, AI468803, AA236830, AW242613, and AA234938. |

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| HLMHT67 | 2640 | 579048 | 1 - 342 | 15 - 356 | AA351877, AI377249, AI377250, AI239499, AC005274, AI132777, and AI023655. |
| HLMHT94 | 2641 | 531054 | 1 - 271 | 15 - 285 | |
| HLMHU80 | 2642 | 799723 | 1 - 282 | 15 - 296 | |
| HLMHW31 | 2643 | 536579 | 1 - 331 | 15 - 345 | |
| HLMHY64 | 2644 | 866458 | 1 - 624 | 15 - 638 | AI251696, AI224583, AI254508, AL036896, AI890297, AW338376, AA171400, AI439525, AW238341, AW189371, AA425283, AA642809, AI754926, AAR07704, AA469230, AA218684, AI473671, AA669238, AA720582, AI185990, AI801479, AA707747, AA525423, AA679946, AA503298, R99253, AW270468, AI279417, AA601712, AI277373, AI754257, AA084320, AA286836, AW274078, AI278440, N26159, AA197089, AI890468, AA180056, AA713946, AA814503, AI904840, AI860423, AA523812, AI890111, AA828045, AI332615, AA224759, AI744199, AI733523, AA829565, AI913167, AI049994, AI869797, AI800426, AA873737, AW089625, AW328446, AI095206, AL078584, AC005529, AC005527, AL139054, AC006441, AC005940, AC006449, AL024498, AL022316, AC004636, AC004242, AC005225, AL121923, AL121754, AC004973, AC003104, AC006581, AL031347, AC004099, AC004382, AL109798, AC004870, AL122023, AC005520, U52111, AP000510, AC005288, AC006947, AC005914, AC006030, AL031427, Z99129, AC010077, AJ251973, AL034420, AC005823, AC005081, AB023048, AC004797, AL021707, Z83840, AL049776, Z82245, U80017, AC006023, AF111168, AC003682, AF111167, AC005210, AC007066, AL049712, AP000089, AC004755, AL022237, AP000141, AC018769, AC007052, AF190465, AC005837, AC003969, AP000501, U73634, AC007488, AC005620, AC007030, AF196969, AP000359, U78027, AL021393, AC004156, AC004263, Y14768, AL031284, AF129756, AC009336, AC006538, AC003036, AD000092, AP000505, AL035072, AF205588, AF015720, AC003007, Z99774, AL022320, D87675, AL035422, AC005070, AC006211, AC006071, AC004638, AC002433, AC005412, AL049761, AL109839, AC005399, AL034548, Z95116, AL022097, AC002347, AC004448, AC007685, AL117258, AC005859, AP000503, AC005803, AL031311, AC005632, AL109963, AC003663, AL033533, AC006060, AL049869, AL033381, AL049793, U82668, AP000694, AF196972, AC007546, AC004967, AC004963, AC005908, AL031286, AC006277, AJ229041, AC002991, Z98051, AF130248, AC008154, AC002045, AC002470, U95742, AC005778, AC005937, AL023803, AL031602, AC004150, AL049552, AC004814, Z86090, AC007216, AL009181, AL078621, AC004409, AC005180, AL109827, AL035458, AC006101, AC004021, AC002369, AC005695, AC009288, AC007563, AC007536, AC004584, U91326, AL031589, AC007708, AC016025, Z97630, AC005160, AC005231, AC002350, AL022165, AC004816, AP000354, AF134726, Z93017, AL023575, AL049759, AL035462, Z80998, AC005874, AF134471, AL033527, AC006948, AP000557, AC002314, AC007096, AL121652, AC012099, AC002544, AP000552, AC007390, AC004583, AL033392, AC008018, AC004004, AL049780, AC007068, AC005730, AC002302, AP000511, AC004486, Z81315, AC005411, AL035460, AF207955, AC002367, AP000104, AC002094, AC002350, AC005261, AC006197, U91325, |

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| HLMHZ14 | 2645 | 1 - 190 | 15 - 204 | AC007225, AL035071, AC005207, AC007324, AC004929, AC000353, AC003688, AL008718, AC005237, AL034549, AL035086, AC005841, AC007981, AB001523, AF030453, AC009275, AL049872, AC007845, AC005776, U52112, AC005821, AC007021, AC005344, AP000030, AP000211, AP000133, AL021978, AC004811, AL121603, AC004985, AC007774, AL031680, AC004821, AC005358, and AC005088. |
| HLMHZ59 | 2646 | 1 - 184 | 15 - 198 | |
| HLMIC94 | 2647 | 1 - 279 | 15 - 293 | AC002549. |
| HLMIE70 | 2648 | 1 - 289 | 15 - 303 | AC009363, and AC007182. |
| HLMIF22 | 2649 | 1 - 132 | 15 - 146 | AL031282. |
| HLMIG11 | 2650 | 1 - 289 | 15 - 303 | AA559319. |
| HLMIG50 | 2651 | 1 - 572 | 15 - 586 | AA569287, AA603349, AA639913, AA359559, AA524229, AA887181, AA359422, AA424170, AI569363, AW088581, AA491954, AA226519, AA081883, AA328334, AA485092, H61906, AL046471, AI962985, AA226204, Z98742, AC005972, Z83847, AC007277, AC006449, AC007216, AC005510, AC006251, AC005803, AL133445, Z98884, Z82180, AC006453, AL136295, AC004834, Z99716, AE000658, AC004707, AF038458, AC005280, AC006241, AL024507, AC004149, D83253, AF015720, AC004765, AC002565, AL078644, AC006441, AL031283, AC006120, AJ229041, AL096703, Z96074, AC006060, AC005529, AC004106, AL022721, AC004878, AF053356, AL034406, AC008372, AL031659, AL132826, AC002563, AC006539, AL109798, AC002300, AC007021, U95090, AL031005, AC005102, AL133163, AC005291, AC006512, AC005599, AC005484, AC007899, AC004821, AF207550, AC004382, AC002347, AC004750, AC004966, and AL031668. |
| HLMIG72 | 2652 | 1 - 317 | 15 - 331 | H67040, W20228, AL049836, Z94160, AFI96969, AC004509, Z97054, AC009501, AC006511, AL023753, Z82244, AF031078, AF030876, and AC002407. |
| HLMIH10 | 2653 | 1 - 387 | 15 - 401 | T03401, AA811741, AA488689, W00856, AA192764, T41134, T07327, AI174489, AA470567, H72444, AA364082, AA368329, AA411590, F00937, AA736713, AA434346, H54729, AA827383, AA741403, AI018726, AA481765, T03928, AA634822, AA527030, T83057, AI143653, AA663373, AA748840, AA279649, AI130709, AI536858, AI537995, AW148775, AI814682, AI291439, R95840, AI928890, AA831801, AA230221, AW190277, AA832016, AA668727, T68315, AA626595, AA598889, N80390, AI683019, AA587835, AA214453, AA214457, AA489240, AA713735, AA598497, AW236235, AA605243, AA167809, AA740571, AI873627, N72170, AA910316, AA714073, AA339123, AW272640, H78898, AI040472, AA598740, AA533660, T46997, AA513884, AA135761, AA079076, AW090710, H63220, AW019964, AI150934, AA666066, AA084950, AA846014, AA525407, N47820, H43183, AA515351, AW239465, AI624038, AW337805, AA015948, AA584788, N55296, AA192293, AI362694, AI860535, AI903464, AA084439, AA584531, AI732176, AI732116, N66744, AA594179, F19019, AI871691, AL039117, AL039117, AA155817, H78855, AA680221, AA055667, AI114733, AI133552, |

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| HLMTH44 | 2654 | 883871 | 1 - 524 | 15 - 538 | AI003137, AI039257, AI870176, AA831997, T46998, AI669149, AI459879, AA564753, AA741301, AA601378, AA421536, AI002863, F25759, AA522864, AI054341, AA513484, AA525807, AA579082, AA827113, AI654520, AA485979, W69639, AI792623, AI003620, AA587826, AA573062, AA323838, AA132445, AA568950, AW162762, AA808064, X69951, Z83844, AL079303, AC006241, L78833, AL035414, AP000099, AP000036, U73648, AC002037, AC004500, AL031776, AL031680, AC005180, U55184, AL023574, AC005777, AC007193, Z72006, AL031719, AL132641, U95626, Z83820, AC005619, AL109939, AC004675, AC005409, AF088219, Z99941, U95742, AC007216, Z93848, L12582, AC005231, X64467, AP000348, AC007565, AC005566, AC004760, AC005778, AL031803, AP000255, AL033392, AC004587, AL109963, AL049575, AC000379, AC005841, AP000213, AC004522, AL109623, AL078581, AC004230, AP000347, AL035699, AL035588, AC005215, AP000135, AC004655, AC003689, AC004838, AC007631, AL096791, AP000031, AC000111, AF165926, AC008014, AC007736, AL021937, AC011331, AC006538, AC006115, AC005815, AC004025, AC006111, AC006146, AC005722, AF109907, L05072, AC005943, AC007204, AF043945, AC007537, AC003072, Z82208, AP000563, AC005895, AC002407, AC005057, AC004132, AL035400, AL031673, Z82201, AC004886, U52111, AC005730, AC002549, AC002094, AL132987, AC007842, AC002492, AL135744, Z74739, AC016831, M81596, AC005914, AC007157, M74558, AC005519, AC004647, AC005576, AL008630, AC004031, AL022327, AC002404, AL023656, AL030996, AC008115, AL135960, AJI31016, AL110200, AR060469, AP000214, L38592, Z49155, AC002481, Z69890, AF217403, U73330, AP000302, AF006487, AC005256, AP000534, AC006950, AD000864, AC005390, AC007292, AC002522, AC005197, AC005620, AC003111, AC000095, U93305, AF027974, AC005271, AL080242, AL80242, AC007421, U91320, AC003692, AL031602, AC003041, AC004131, Z98750, AL049612, AL023575, AC005606, AL109956, AL008734, AF003626, AP000221, AC007421, AL049538, AC006968, AL031594, AL035249, AP000046, AP000114, AP000074, AP000085, U89337, AL049610, AC005752, AC005300, Z98172, Z97876, AC002115, AL080316, AC005102, AP000952, Z95113, AD000092, AL049843, AL080276, AL031447, AF196969, AL008730, AC005277, AL109627, AL050307, AL132826, AC008044, AC006543, AC005839, Z98745, AC002418, Z83846, AC005681, Z82203, AL031643, AF064861, AL020997, AC004590, AC004967, U62317, AL031904, AC003969, AC006317, Z83843, AC005913, AC004674, AC004593, AL049588, AC005915, AC007676, AC004895, AL080286, AC009501, AC004674, AC007179, AC002349, AC009542, AC010205, Z98884, AC006441, AC007387, AC005598, AC012085, AC004882, AC004386, AC003013, AC006385, AC005697, AC009330, AF196779, AC004485, AC005678, AC004106, AC009509, AC006946, AC005323, L44140, Z99716, and AF111168. |
| HLMIL62 | 2655 | 799713 | 1 - 422 | 15 - 436 | AA773956. |
| HLMIM73 | 2656 | 576692 | 1 - 336 | 15 - 350 | AL133485.<br>AI880829. |

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|---|---|---|---|---|---|
| HLMIO47 | 2657 | 531224 | 1-173 | 15-187 | |
| HLMIP23 | 2658 | 686670 | 1-700 | 15-714 | R93381, H53163, H28130, R93382, H53060, AW015657, AI092249, T86432, H49391, AW190127, AA625561, AI339159, AW250827, AI357128, AI148823, AI818046, AA579979, AI439571, AI095655, AW246805, W72325, AA379087, AI817450, AI761511, AA625749, AA099988, AW081185, AW389525, AI885881, AA745180, AA805668, H64600, AA211386, W72109, U51698, AA973184, AI358231, AA379088, AA765921, AI744539, AI885882, AW377601, AA291023, AI933181, AI872742, AA992858, AI911887, AI337237, F37915, AA317577, F34702, W77795, H49202, AA732721, AC003103, AF161395, AI249940, and AF083208. |
| HLMIQ11 | 2659 | 921009 | 1-772 | 15-786 | AI034373, H01560, AI760723, AI741933, AI808161, AA768221, AA848005, AA824447, AA848006, AA766456, H01464, AA835854, AI222026, and T18554. |
| HLMIQ72 | 2660 | 715650 | 1-358 | 15-372 | Z82206. |
| HLMIQ73 | 2661 | 764522 | 1-386 | 15-400 | |
| HLMIQ93 | 2662 | 576657 | 1-310 | 15-324 | |
| HLMIR23 | 2663 | 916938 | 1-345 | 15-359 | AL031651. |
| HLMIR40 | 2664 | 578756 | 1-433 | 15-447 | AB020864. |
| HLMIS03 | 2665 | 924651 | 1-337 | 15-351 | Z82243. |
| HLMIS16 | 2666 | 572430 | 1-256 | 15-270 | AC009731. |
| HLMIS64 | 2667 | 572509 | 1-348 | 15-362 | |
| HLMIS77 | 2668 | 971141 | 1-298 | 15-312 | AI880168, AW074398, AA435854, AW169687, AI344844, F19258, AA548137, AI345654, W60516, AA515224, AI205126, AW193295, AA747472, AW265654, AI890928, AI160117, AI914706, AW327360, AI963786, AW265197, F29989, AW261871, F28576, AI569086, AI890570, AW166815, AA229785, AI079910, AIR65364, AW188544, AI445436, AI708009, AI674873, AI962050, AI358229, AA308806, AW406755, AL079645, AI365988, AI890923, F36273, AI917271, AI284640, AI929531, AA581903, AI051551, AW339687, AL042856, AA559290, AI635272, AW302709, AA244415, AW162049, AI904894, AA515051, AA579184, AL041368, AI818620, AI471374, AI951495, AI357551, AI003743, AI339850, F25203, AW264969, AI252085, AI557323, AW238016, AI252114, AW264973, AL041146, AI792903, AI792864, AI733957, AL038785, AI734002, AW130799, AI623720, AI890052, AW029038, AA641103, AL138265, AW169230, AI251002, AI433187, AI610159, AW080134, AI038279, AA179136, AI349874, AI521618, AA599021, F24284, AI110770, AI473943, AI298710, N71724, AW090811, AW337985, AW338869, AW341892, T71998, AW419262, AI802526, AA715270, AI499503, AA482711, F18974, AI921188, AI471481, AA347927, AW088616, AC006237, AC005827, AC006137, AL031983, AC004816, AC005295, AC005412, AC004931, AC006299, Z98950, AP000354, AF134726, AC004019, Z85996, AC005632, AL049871, AL049775, AC004685, AP001054, AC005696, AF001552, AC004065, AC005822, AP000292, AL008708, AC005164, AF039905, AC004451, AC007161, AC005815, AC005164, AC004451, |

| HLMIS85 | 2669 | 578751 | 1 - 315 | 15 - 329 | |
|---|---|---|---|---|---|
| | | | | | AL109618, AC005071, AC006538, AC006071, AP000111, AP000043, AC005785, AC005250, AC007065, AC004963, AL023694, AL035450, AP000097, AL034421, AP000020, AC002483, AJ251029, AJ131358, AB002390, AC002499, AL049860, AF023460, AL117351, AC007539, AL022397, AC004914, AP000240, AC005939, A39972, AC006127, AC006537, AC005568, AL049539, AF196969, AJ003147, AC000958, AC006249, AC004042, AC006561, AL031775, AC004808, AF196972, AL022328, AC005099, AC005488, Z82206, AL035405, AC006026, AC007565, AL031346, AL034370, AL035703, Z98884, AC009891, AP000044, AL049872, M87918, AL035458, AC004008, AC002564, AL133500, AL133396, AC000396, AL033543, AL031675, AP000173, AC006061, AL031905, AC006597, AC003682, AL022476, AF120990, AC005829, AC006950, M26434, AC005393, AL008723, AC004383, AL031651, Z95114, AC002430, L44140, AL021453, AC007387, AC007384, AL118518, AF015725, AL121915, AI049745, AC007558, Z84469, AL031277, AC005341, Z83844, AC004664, AC005040, AJ229042, Z86062, AF123462, AC005740, AL031120, AF125348, AC005592, AC002072, AL031296, U80017, Z98747, AL050318, AL137100, AC005552, AC002059, AC000119, AC006312, AC005823, AL121748, AC004259, AB020867, AL034451, AC002349, AC004072, AI109865, AC006476, AP001172, AC004057, AP001042, AP001043, AL133382, AF017257, AC005091, AL035588, Z95889, AC006996, AL022162, AL080243, AC002316, AL035683, AC006013, AP000355, AC009227, AL078621, AC004132, AC007064, AC004876, AL035684, AC002454, AC005902, Z98257, Z69666, AF205588, AC005782, AC002350, AL031276, AC005996, AC006007, AC004675, AC004812, AC002351, AC004832, AF088219, AC009405, AP000298, AC008041, Z83826, AC004622, AL049834, AF027390, AC003065, U73635, AL008719, AB023057, AC005057, AP000520, AC005002, AC006208, AC007245, AC005411, AC005069, AC003041, AL049712, U32581, AB007881, AC005033, AL135746, AJ239321, and AC007488. |
| | | | | | AA148615, AA826983, AI002177, AA832130, AA501575, AA911524, N94192, N42040, AL048544, AL038936, AW380074, AL046678, H21449, AA176605, AI338426, H42075, R59567, AL043098, AW438916, AW075915, AA172191, N27833, H96518, AL044590, AA319830, AA304977, F32893, AL038909, AA321105, AI471418, AW270258, H15814, AA379332, AI744949, AA226584, AA513850, AA381762, H60188, AA713922, AA381747, AL040473, AI886060, F18350, AA226270, R39626, AI500454, AA744444, AW247819, D44678, AI886365, AI925321, AA745356, W90237, AA570416, AA987962, AA528441, AA379133, AA461308, AA574442, AA488620, N27362, AA599352, AA410926, AA610509, N69316, AA747243, AI298281, AA720746, AW008237, AA804993, AI912322, AW236342, AW078495, N54764, AI932884, AW440976, AA573127, H72688, AA215335, AI446601, AI24758, H55914, AW341903, T48341, AA548087, AA084070, AI075266, AI613419, AA648044, AI291124, AI223616, AA984191, C16699, N27651, AI625468, AI291268, AI537030, AI926681, AI282336, |

| Name | ID | Number | | | Accession Numbers |
|---|---|---|---|---|---|
| HLMIS89 | 2670 | 572506 | 1 - 351 | 15 - 365 | AI860677, AA737150, AW129694, AI908628, AA608667, AA657741, R07395, AA213741, AI250019, AI144055, AA758143, AA928904, H52974, AA729471, I148865, R97934, AA513293, AW057776, C05694, AA603156, AA843878, AA055601, R10488, AC003003, AC004814, AL035424, AC004821, AC004797, AF069074, AC002565, AC004996, AF000952, AC002425, AP000500, AC004885, AL110502, AC004918, Z15026, AC004181, Y14768, AP000505, AF129756, AC006142, AC006238, AC000087, AC002418, AP000234, AP000148, AP000233, Z83843, AC004386, AC004527, AC004498, AC005390, AC004596, AP000503, AP000496, AC004217, AC007161, Z86061, AC004835, AL121825, AC007237, AC004231, AC005288, AL022097, AC005399, AL121657, AC004832, AL022067, AF134726, AC005823, AC005746, AC005971, AF048990, AC005186, AF222685, AL035420, AL020095, AF001550, AL031733, AI050326, AC007450, U91319, AC005826, AC000111, U91326, AC005358, AC004167, Z83846, AC006379, AC007151, D45371, AB012165, AL121653, D87001, D86993, Z83855, D88268, AC002559, AC002369, AC002996, Z93017, AC007023, AC005304, AC007371, AC006566, AC005015, U95742, AL121658, AC004765, AB032486, AC008067, X74984, AC007216, Z68322, AC004864, AC005740, AC005034, AC008124, AC008067, X74984, AC007216, Z68322, AF148319, Z84723, Z72521, Z69890, Z74019, AC005361, AL031721, Z86001, AC005946, AC000039, Z97183, AL031393, AC005306, Z82097, AC004651, AL121846, AC004236, AC005796, AC006273, AB008681, AL031058, AP000255, AL035072, AL031575, AC005755, AL049653, AC004922, AC004938, AC005480, Z94160, AP000213, Z85999, AL008635, AC002115, AC004584, AC004263, AL031774, AP000135, AL034379, AC002551, AL034420, AL034425, AL031984, Z84720, AP000351, AC006088, AL022326, AL034402, AC006019, AC008044, Y18000, Z93016, AC007283, AC004000, AC002073, Z82214, AC004253, AL035067, AL009028, AL080317, AF114156, AC006455, AC002432, AC005913, AP000031, AP000556, AC004921, AC004020, AC020663, AC006157, AC006512, AC005242, AP000350, AP000356, AC008275, AC005225, AC007263, AL035405, AC006600, AC004882, AC008064, AP000355, AL035089, AC016027, AC011362, AL080243, AC005696, AC006265, AC008080, and AC005081. |
| HLMIT37 | 2671 | 799711 | 1 - 220 | 15 - 234 | |
| HLMIT43 | 2672 | 799705 | 1 - 295 | 15 - 309 | AI188748, and AI188321. |
| HLMIT76 | 2673 | 856860 | 1 - 358 | 15 - 372 | T82950. |
| HLMIV09 | 2674 | 799740 | 1 - 391 | 15 - 405 | U50537. |
| HLMIW07 | 2675 | 871698 | 1 - 280 | 15 - 294 | |
| HLMIW89 | 2676 | 799753 | 1 - 187 | 15 - 201 | AW051629. |
| HLMIW90 | 2677 | 920464 | 1 - 310 | 15 - 324 | AI332830, AI887069, AA883715, H43750, AF031077, AF031078, and AF030876. |
| HLMIX61 | 2678 | 727730 | 1 - 693 | 15 - 707 | H14342, AI333074, AW015007, AI565858, AW387096, AW387086, AW062872, AW178917, |
| HLMIX95 | 2679 | 960056 | 1 - 683 | 15 - 697 | |

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| HLMIY56 | 2680 | 571401 | 1-296 | 15-310 | AI122052, and AB018336. |
| HLMIZ02 | 2681 | 920426 | 1-366 | 15-380 | AL034408. |
| HLMIZ25 | 2682 | 825087 | 1-258 | 15-272 | AL135476, and D63478. |
| HLMIZ40 | 2683 | 715586 | 1-241 | 15-255 | |
| HLMIA05 | 2684 | 932173 | 1-363 | 15-377 | |
| HLMJA30 | 2685 | 955980 | 1-345 | 15-359 | AI902968, AI902983, AA291228, D31488, AA324899, D31516, AI969121, AC004235, and AC004034. |
| HLMJA66 | 2686 | 799731 | 1-343 | 15-357 | |
| HLMJA83 | 2687 | 712447 | 1-491 | 15-505 | |
| HLMJB04 | 2688 | 968284 | 1-293 | 15-307 | F19459. |
| HLMJB23 | 2689 | 578827 | 1-309 | 15-323 | |
| HLMJB60 | 2690 | 924974 | 1-341 | 15-355 | AL042756. |
| HLMJC35 | 2691 | 576944 | 1-287 | 15-301 | |
| HLMJC76 | 2692 | 770177 | 1-345 | 15-359 | |
| HLMMA16 | 2693 | 576612 | 1-308 | 15-322 | AC011504, Z93930, AC006398, AP000247, AL049759, AL020997, U95090, and AC005049. |
| HLMMA52 | 2694 | 920292 | 1-453 | 15-467 | |
| HLMMA76 | 2695 | 799741 | 1-326 | 15-340 | AL023653. |
| HLMMC72 | 2696 | 760717 | 1-302 | 15-316 | |
| HLMMD05 | 2697 | 932127 | 1-401 | 15-415 | |
| HLMMD26 | 2698 | 799743 | 1-337 | 15-351 | |
| HLMMD28 | 2699 | 959900 | 1-173 | 15-187 | AC002400. |
| HLMMD89 | 2700 | 920442 | 1-149 | 15-163 | |
| HLMME77 | 2701 | 710989 | 1-395 | 15-409 | |
| HLMMF24 | 2702 | 677303 | 1-498 | 15-512 | W38578, AI476515, AW207177, AI630843, AI340048, AI807826, AI440328, AI766156, AW136049, AI990469, AI830815, AI951610, AW139134, AI745414, AI620207, AI417731, AI479435, AI700511, AA342377, AW241823, AW139388, AW439228, AI433438, AA935611, and AA872559. |
| HLMMF82 | 2703 | 571403 | 1-262 | 15-276 | |
| HLMMG02 | 2704 | 920427 | 1-352 | 15-366 | AC006274. |
| HLMMG23 | 2705 | 881361 | 1-331 | 15-345 | |
| HLMMI18 | 2706 | 666575 | 1-421 | 15-435 | AC007690. |
| HLMMI86 | 2707 | 678672 | 1-331 | 15-345 | M63543, and M63544. |
| HLMMJ08 | 2708 | 959630 | 1-427 | 15-441 | AI685869, AD000812, and AC002126. |
| HLMMJ37 | 2709 | 577571 | 1-354 | 15-368 | |
| HLMMK28 | 2710 | 577670 | 1-447 | 15-461 | |

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| HLMMK39 | 2711 | 1-303 | 15-317 | AA400917, AA652249, AC005069, AL133216, AC006213, and AL021307. |
| HLMMN01 | 2712 | 1-264 | 15-278 | AI792650, and AP001065. |
| HLMMN32 | 2713 | 1-430 | 15-444 | AA299728, AI336771, T08386, H58891, AA487512, AA579399, AW408767, AA846482, AI890283, AC006538, AC004967, AL022328, Z03930, AC004983, AL132987, U91323, AC004776, AC005988, AL050308, Z98304, AL034548, AF222686, Z86061, AC007685, AP001067, AC002448, AC005342, AJ011930, AB020863, AC004890, AC005157, AP000046, AP000114, AC002492, AL049856, AL109618, AC007687, AF205588, AL020995, AP000317, AP000119, AP000051, AP000166, Z99128, AC005015, AC006960, and AC004921. |
| HLMMN91 | 2714 | 1-387 | 15-401 | |
| HLMMO61 | 2715 | 1-272 | 15-286 | |
| HLMMP25 | 2716 | 1-326 | 15-340 | AI394634. |
| HLMMP68 | 2717 | 1-351 | 15-365 | AF008203. |
| HLMMP69 | 2718 | 1-294 | 15-308 | |
| HLMMP75 | 2719 | 1-323 | 15-337 | H00150, and T20044. |
| HLMMP88 | 2720 | 1-671 | 15-685 | |
| HLMMR20 | 2721 | 1-432 | 15-446 | AP000331, AP000172, AP000057, AP000125, and Y17293. |
| HLMMR39 | 2722 | 1-271 | 15-285 | N62666, AA857377, AA205304, AI762045, AL022328, AC006312, AP000502, AL022326, AL034548, AL034423, AF134726, AC005668, AC005488, AC006044, and AC007537. |
| HLMMR45 | 2723 | 1-434 | 15-448 | AI249526, N52227, AI963514, AA404287, AA401240, AA287872, AA494038, AA700551, AA704781, AA490908, AA420998, AA421078, F32710, AI241835, AA236867, AA237066, AA188992, AC007371, AP000354, AL096701, AC005668, AC005254, AC006285, AI035587, AL121653, AL008721, AC007686, AF001550, AC002470, Z98051, AC005820, Z85987, AP000557, AL117258, AC004814, AC005839, AL122020, Z98051, AC005921, AL049759, AL133163, AC005480, AF196970, AC003101, AC005578, U62293, AC005702, AC005057, AL096712, AC006561, AL008729, AL008582, AP000556, AC004694, AC005225, AC007308, AC004883, AC005920, AC006017, AL121769, AC004796, AL020993, AC005225, AL022163, AL080243, AC005500, AL022328, AC005291, AP000512, AB023049, Z68276, AL022313, AC004019, AL109798, AC005332, AC002422, AC005887, AF129756, AC005726, U95090, AL109653, AL035458, AL035423, AC016025, AC005332, AC002422, AC005280, AL022318, AC004103, AC002395, AL031055, AC004231, AL121694, AC006271, AC005280, AL022318, AC004103, AC007731, AC007011, AC005288, and AC008012, AL023799, Z46936, AC005755, Z85986, AC007731, AC007011, AC005288, and AC002522. |
| HLMMT08 | 2724 | 1-672 | 15-686 | W90795. |
| HLMMT22 | 2725 | 1-416 | 15-430 | |
| HLMMT72 | 2726 | 1-323 | 15-337 | AF111170. |
| HLMMT74 | 2727 | 1-353 | 15-367 | |

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| HLMMT76 | 2728 | 578143 | 1-296 | 15-310 | |
| HLMMU42 | 2729 | 424663 | 1-289 | 15-303 | T90204, and AA658177. |
| HLMMV25 | 2730 | 799718 | 1-447 | 15-461 | W87501, AL138252, AL021938, U52112, AC004802, AC000091, AC005258, AC005519, X63735, AC006430, AC002477, AC005264, X78262, AC008041, AC004463, AL034548, AB022785, AC005377, and AL035414. |
| HLMMV63 | 2731 | 463919 | 1-544 | 15-558 | AA490121, and AA668334. |
| HLMMV65 | 2732 | 799706 | 1-441 | 15-455 | AC004983, and AC003043. |
| HLMMV66 | 2733 | 926188 | 1-436 | 15-450 | AI921541, AI808637, AI792451, AI054048, T29020, AW084519, AA614014, AW271140, AW207518, AA525796, and D30758. |
| HLMMW06 | 2734 | 935621 | 1-259 | 15-273 | |
| HLMMW07 | 2735 | 953833 | 1-343 | 15-357 | AC002302. |
| HLMMW29 | 2736 | 577160 | 1-293 | 15-307 | |
| HLMMW33 | 2737 | 702478 | 1-270 | 15-284 | U63312. |
| HLMMW37 | 2738 | 577153 | 1-341 | 15-355 | AC002313, and AC002111. |
| HLMMW44 | 2739 | 716797 | 1-372 | 15-386 | AA604843, H85059, AW069227, AA664604, F32893, AA878140, AI679294, AA604865, AW302048, AI689019, AI679871, AW438616, R92640, AW103383, AI471418, AI275183, AI634187, H79633, AI457313, AI002261, AA448838, AA574442, AA508873, AA857381, R95748, AI307201, AA311071, AA357987, R83585, AW189068, AA613754, H55894, AW402145, AI754291, AA602458, AA528390, T03412, AI124798, R96643, AA393830, AA350886, AI939442, AI962030, AI289962, AA668587, AA558003, AI571543, F29541, AI963856, AA669102, AA488419, W45215, AW275953, AA488620, AA508578, AI500453, AI832865, AI708005, AA832145, AA599495, AI473701, AI279759, AA662974, AW088058, AW238016, AI627581, AI609223, AA721235, R32162, AI292236, N67387, AA457771, R59868, AA302970, AA610509, AW190505, AW072923, AA309287, AA706209, AA601986, AW373604, AW189353, F03525, AA461308, AA744036, AA904137, AA669647, AA599352, AI569510, F17858, AA492298, AA513141, AC002312, AL049779, AL031291, AC006441, AJ131757, AC016026, AF207550, AC007878, AL050318, AL008723, AC007243, AC004383, AF111168, AC007386, AP001054, AC005046, AL031602, AC000379, AL133448, AC004230, AL031447, AL031597, AC005911, AC004149, AC005908, AL049843, AL022324, AC003037, AF001549, AL035258, AC003003, AC006965, AP000346, AC006515, AL031591, AC007051, AC007032, AC005004, AP000553, AP000347, AL049872, AL031595, AL079305, AF178030, AL035420, AL078624, AC002536, AF064858, AF064858, U96629, AC006285, AC004453, AC007057, |

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| HLMMW5 5 | 2740 | 815997 | 1 - 215 | 15 - 229 | AC003007, AC005412, AL110502, AC005632, AC016025, AC003687, AC006121, Z86090, AL133304, AB020868, AC009501, AC005081, AC005099, AC002300, AF045555, AC007899, AC004928, AC005189, AL049745, AL049745, AC004582, AC005822, AC004659, AL031775, AC007283, AC004448, AC002381, AC007444, AC004924, AB023049, AC007736, AP000103, AC006229, Z68288, AC007151, AC009178, AC006257, AL031120, AC005094, AL050321, AC008009, AC006992, AC002452, AC005900, AC000082, AC006012, AC004764, AC005284, AC007566, AL121820, AC005921, Z84488, AP000350, AC004967, AP000705, AP000269, AC004647, AP000354, AL049569, AC007372, AL132985, AC007461, AL049837, AL096710, AC005369, AC005837, AP000355, AL049874, AC007225, AL133500, AC004382, AL035587, U07000, AC010582, AC006130, AP000356, AC011311, AC006465, AC004167, U82828, AP000512, AC007263, AL021808, Z97989, AL117356, AL121782, Z99129, AC004471, Z96074, AL031432, AC016831, ACN04002, AC007304, AC007226, AP000108, AP000040, AF111169, AC004854, AC005736, AL022722, AL008715, AL080286, AL049776, AC006026, AC006271, AC007242, AL022476, Z93020, AF015262, AL031848, AP000248, AC005914, AJ229043, AC005399, AC004142, AC005384, AL034555, AC000353, U91327, AL031133, AC007201, AC002544, AC006538, AF130343, AP000345, AC007652, AP000127, AP000205, AL035703, AC005932, AL023553, AP000496, AC009248, Z85986, AL079334, AC008012, L78833, AC006251, AC004966, AC003991, X87344, U85195, AC005730, AC007676, Y10196, Z95125, AC005566, AE000658, AC005726, AC003029, AP000252, U47924, AC002554, AC005332, AC006160, AC002546, AC004066, AP000212, AP000134, AF126403, AL133163, AF190465, AC005029, AC003689, AL078462, AC000059, and AC007237. |
| HLMMW7 1 | 2741 | 761346 | 1 - 239 | 15 - 253 | HS9354. |
| HLMMW7 7 | 2742 | 577150 | 1 - 290 | 15 - 304 | AA300028, and AA299804. |
| HLMMX19 | 2743 | 861317 | 1 - 580 | 15 - 594 | AA630476, AI797998, AI360521, AI174703, AW403177, AL036896, AA382050, AI433952, AL121039, AI702049, AW020094, AA526542, AA425283, AI355246, AW265468, AI572680, AW419201, AA491941, AW410409, AI547110, AA631915, AW148964, AI819419, AA084439, AI252005, AI254463, AA601376, AA199578, AI813920, AW023975, AI065031, AI798521, AA809125, AI570067, AW243817, AA493546, AI114543, AA640305, AW410844, AI150934, AA133568, AA199582, AI732690, AI439525, AI567676, AI242236, AA167656, AA524604, AI003068, AI753904, AA814719, N27362, AA598608, AI064968, AA632355, AI744963, T34066, AI568376, AI889236, AW104161, AI052366, AI889177, AW085626, AA555232, AA533066, AA57945, AI702018, AI343986, AI701898, AA601712, AI370470, AI745666, AW007420, AW069273, AW151247, AA593168, AL044966, AI445768, H53546, |

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| HLMMX57 | 2744 | 734985 | 1 - 375 | 15 - 389 | AW182182, AA551105, AA148618, AI031759, AI285651, AA524800, AI040051, AI675913, M77888, AA600127, AI760835, AA533040, F23338, AA482725, AA493245, AI312614, AL037910, AI733523, AW192930, AI311796, AA525753, AI925588, AA421536, AI308529, AJ003147, AC005730, AC002310, AL079342, AC007367, AL049869, AC005484, AP000512, AL049694, AC005619, AF129756, Z98742, AC005921, AC006597, AC004796, AC004150, AC005071, AC005696, AC004659, AP000552, AC005412, AP000504, AF205588, AF111168, AC004997, L44140, AC005585, AC005602, AC002314, AC005971, Z97054, AL020995, AC006511, AL022721, AL080286, AC006011, AC002091, AC004922, AC005082, AC005828, AC005632, AL022316, AC004985, AC018633, AI121658, AC008044, AC004967, AC005527, AC005529, AB017602, AC004895, AL022165, AL049697, AL031575, AC004477, AC004859, AP000499, AC004692, AC005365, Z84466, U91318, AC006530, AL080243, AF134726, Z83838, AC000025, AL031848, AC005041, AC012384, AF196779, AC007546, AL080317, AC005919, AL009181, AF165926, AP000952, AC007160, AF075069, AC003685, AC004999, AC002470, AC002404, AC005261, AC005876, AC005746, AB026898, AC008372, AL133448, AL080250, AL121652, Z97630, AC006121, AE000658, AC005046, AC005913, AC002366, AC006080, AL133243, AC005193, AC006509, AP000346, AL049830, AF053356, AL031668, AF060568, AC005037, Z83844, AC005524, AC004805, AC002349, AP000503, AC005280, AL117337, AC004686, AL031666, AL133304, AC005754, AC005695, Z84469, AD000671, AC007371, AL035587, Z93930, AL034420, AC006088, AC006544, AL035445, AL021154, AC002364, AC004552, AC005410, AL024474, AF001548, AL049795, AC002996, AC003665, AC004084, AL022149, AL034402, Z93244, AF001548, AL079295, AC006211, AC006512, AL031433, AI133163, AC005740, AL022163, AC005479, U52112, AC002126, AC007899, AC005387, AL008582, AC004821, AF038458, AC006581, AC004893, AC007842, AC005231, AL136504, U91327, AL031311, AC007564, AC007390, L47225, AC005666, AC002312, AC003007, U80017, U80017, AC005755, AC005089, AC003982, AL031657, AC005881, AC007566, AL121655, AP000553, AC006515, AC007510, AC006312, AC005081, AC005856, AC004814, AC007381, Z84474, AC004223, AC004882, AC006449, AC007192, AL117258, AC002551, AC006241, AP000365, AL117330, AC004228, AC005317, AC004125, AP000547, AC002991, U78027, Z77249, AC004969, AC012099, AC007226, AL031290, AC005393, AC007124, AL050324, AC004797, AL136130, AC005232, AL031427, AC006116, AL121754, AL049764, AL031678, AL031680, AC002120, AC002306, AC005031, L47226, L47224, AC004752, AC004762, AL035659, AF196969, AC004804, AL122023, AC005694, AL121657, AC003025, AC005015, AL034417, AL022323, AC005822, L78810, AD000091, AC006960, AL132712, AP000556, AC007227, AL034343, AL049777, AC004783, AL136295, and AC006946. |
| HLMMX72 | 2745 | 760651 | 1 - 221 | 15 - 235 | W73175, W73147, and AF086335. |

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| HLMMX73 | 2746 | 764455 | 1 - 334 | 15 - 348 | AW020095, AI538885, AI686576, N22276, AI859693, AA810985, AW161402, AI811192, AA420722, AI440238, AI334893, AI340604, AI345639, AI349960, AI310930, R80916, AI345745, AI377163, AI348995, F35534, AW084447, AI336495, AA761079, AI254457, AI312993, AW021059, AI680194, AI345014, AI520964, AI624138, AI002285, AI440397, AW089379, AI348895, AL045672, AI758538, AI567582, AI307520, AI345026, AI307454, AI352363, AI345562, AI340664, AI310592, AI307542, AI345817, AI288076, AI344808, AI345739, AI345674, AI671642, AW021189, AI312143, AI349637, AI312168, AI344843, AI334920, AW071276, AI344779, AI310927, AI307515, AI307578, AI336488, M85164, AL133640, AL137479, Y10655, AL122093, AL050116, AF033827, AL137267, AL049276, AL117435, AF175903, U79457, AB007812, Y07915, AL122110, AL117575, AI117438, AR022283, I52013, AL049426, AL137465, AL137641, AL110280, AB016226, AF118090, AL117457, AL136842, AF201468, AI137262, U89295, AF145233, I33391, AF069506, AL137258, AF042856, E13052, U53505, and AL110269. |
| HLMMX85 | 2747 | 783429 | 1 - 192 | 15 - 206 | |
| HLMMY01 | 2748 | 916636 | 1 - 568 | 15 - 582 | AI050812, AI827703, AI827584, and AF127916. |
| HLMMY03 | 2749 | 924511 | 1 - 506 | 15 - 520 | |
| HLMMZ13 | 2750 | 856802 | 1 - 444 | 15 - 458 | AL135357, AA064815, AA707879, AC006947, AC005037, AC005411, AC004148, AL024507, AC004106, AC002470, AL121652, Z83822, AC005538, AL096791, AC005031, AP000555, AC004998, AC007129, AC004491, AC006430, AC005921, AL022320, AL096763, AL031680, AC006271, U80017, AC005300, AC005666, AL049779, AC005180, AC007685, AL031311, AL031643, AF200465, AF111169, AL121578, AC007263, AC006441, AC006946, AL021154, AC006966, AC007649, AC006515, AL022312, AB003151, AF139813, AL133353, Z83844, AC005179, U52111, AC005821, AC003684, AC005332, AC002045, AC002430, AL009183, AP000044, AP000112, AL121655, U95742, AC005620, AC007066, U95743, AC007384, AB020868, AC004983, AP000690, AC007216, Z97876, AF024534, AC002350, AF111167, AC004499, and AC006014. |
| HLMMZ16 | 2751 | 927659 | 1 - 143 | 15 - 157 | AI832562, AA115758, AA112944, and Z93784. |
| HLMNA14 | 2752 | 918207 | 1 - 680 | 15 - 694 | AW007018, AI797782, AI082366, AI004621, AI961043, AI568510, AI479909, AW243347, AW005434, AW072053, AW205104, AI950423, AA220947, AI824907, AW136734, AA932943, AA227014, AI937632, AI654366, AI968787, AW137409, AW136158, AW137226, AA126260, AI392819, AI420238, AI656029, AI420881, AW051726, AI199450, AI767282, AI206270, AI700009, AI245711, AI738987, AI738427, AI860164, AW302243, AI936399, AA888132, AI805239, AI738729, AI474889, AW197199, AA218581, AI568827, AI382249, AA662157, AA398373, AA887699, AA582927, AI126364, T85626, AI878821, AI684228, and AI498040. |
| HLMNA84 | 2753 | 577572 | 1 - 725 | 15 - 739 | AI554874, AA228131, AA227984, AW377797, AW227774, and AA227773. |
| HLMNA88 | 2754 | 856809 | 1 - 428 | 15 - 442 | AA935428, AW002831, AA507814, AI186438, T06210, AA492584, AA558404, AA303055, T94140, AW104163, AI870453, AA365135, AA772906, AA668291, AA225406, AW272294, |

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| HLMNA91 | 2755 | 765862 | 1-434 | 15-448 | H65824, AI452836, AI587467, AA713705, AA599712, AA779783, AI369580, AA484164, AA831903, AI217131, AL048002, AI635028, AA224593, AA720582, AI274011, AI923451, AA508036, AA525293, R64617, AL134332, AI860751, AI923458, AI918419, AI580707, T10586, T56727, AA515138, AA487569, AA516320, AA747234, H71678, AC006965, AC004865, AC005291, AC007130, AL118510, AC004778, AL031672, AL008718, Z97353, AC010205, AL109627, AC004491, AC006120, AL135744, AL035685, AL035458, AL035405, AL031121, AL022327, AP000555, Z84484, AC003013, AC004836, U52112, AC005274, AL033517, AC006960, AF205588, AC002300, AC005696, AL050321, AL022320, AL035410, Z95115, AC004106, AC006312, AC005015, AL009181, AL049779, AC006013, AC005049, Z99127, AC007686, AP000556, AP000557, AC006449, AL034420, Z93020, AP000884, AL035400, AL049539, AC006455, AC002429, AF001548, AC002476, AC006121, AC008372, AC004686, AC006479, AC000025, AC005280, AC008273, AC002312, AF109907, AC004098, AC011311, AC004000, AC007687, AC006165, AB023051, AP000512, AC008249, AC007199, AC005002, AL031643, AF001550, AC005409, AL034351, Z98304, AC004605, AC007016, Z85987, UR2828, Z83847, AL049843, AL034400, Z95116, AP000696, AC003010, AC005529, AC005921, U80017, L78810, AP000288, Z82097, AC005563, AC005784, AC006071, AP000109, AC003104, AL008635, AL035419, AL049759, AC004881, AC007041, AL031594, AL080243, AC004913, AP000256, AC006254, AF053356, AL117339, Z98946, AC004020, AL031589, AC005225, AC006946, AL035699, AC003041, AC007934, AC005288, AC018633, AC005180, AC005037, AL109758, AC004933, AC008085, AC003029, AP000098, AP000692, AC004859, AL031685, AC002456, AC002369, AC003108, Z94721, Z98048, AC004209, AL031283, AP000008, AC007371, AL009172, AC003982, AP000704, AC016027, AC005871, Z83838, AC016830, Z93023, AF196779, AL035658, Z93017, AL022319, AC004167, AC004531, AL096774, Y14768, AC004998, AL136504, Z98050, AC006487, D42052, AC004531, AL034561, AP000505, Y08837, AC005913, AP000466, U95739, AC005368, AL035417, AF035587, AC004656, AC004031, AL031279, AL049748, Z82174, AC003967, AJ225782, AL109852, AP000243, AL050341, AC007129, AC004743, AL034551, AF159056, AC003667, Z97989, AL133353, AC005618, AC005736, AL035587, AC007011, U93305, AC005043, AC004890, AC004216, AP000493, AL139054, AL031767, Z97056, AC005837, AC004647, AC007842, AL034553, AB014077, AL117337, U89335, AP000041, AL035078, AL031846, AC004242, AC000353, AC005822, AL022323, AF003626, and AC003025. |
| HLMNB08 | 2756 | 959559 | 1-348 | 15-362 | AL135666. |
| HLMNB94 | 2757 | 575838 | 1-245 | 15-259 | AA730982, AA278761, and AA815056. |
| HLMNE84 | 2758 | 760695 | 1-348 | 15-362 | |
| HLMNG08 | 2759 | 876147 | 1-902 | 15-916 | AI732794, AI821335, AI379196, AA486272, AA486273, AI734181, AI821049, T64007, AI865113, and T64086. |

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| HLMNG68 | 2760 | 921008 | 1 - 328 | 15 - 342 | H01560, and AI034373. |
| HLMNH23 | 2761 | 787043 | 1 - 419 | 15 - 433 | |
| HLMNH25 | 2762 | 575921 | 1 - 393 | 15 - 407 | W92492, and T80433. |
| HLMNI37 | 2763 | 920361 | 1 - 357 | 15 - 371 | |
| HLMNI69 | 2764 | 531356 | 1 - 224 | 15 - 238 | |
| HLMNL01 | 2765 | 835623 | 1 - 256 | 15 - 270 | AC003111, and AC004798. |
| HLMNL06 | 2766 | 935626 | 1 - 456 | 15 - 470 | L44341, AA283762, AA825204, AA282978, AW150394, AI460103, AA130647, F19258, AA601492, AI679379, AI679888, H54443, AA079421, H55779, AW172908, AA364488, F13749, AA467730, AA847099, AA603323, AL135643, H84359, H62778, AI751162, AW162288, AI124660, AA878149, AI696793, AL047317, AI537185, AA078677, AA443065, N55357, AA714140, AI025517, AI709066, AA225155, AA658235, AI689019, AW276435, AI193694, AA947837, AA554293, AA482757, AI138344, AA526514, C06471, AI867044, AA654627, AL039187, H69588, Z30128, F29989, R54896, AI286264, AA650244, AA776971, AA772016, AW238127, AA385100, AI358229, AW406755, AI467877, AW157005, AI365988, AI028510, AA319218, AA558697, AA299601, AW003434, AI610603, AW339687, AI801591, AI914913, AI635272, AA021552, AI499503, AA558269, N87410, AA826144, AA243452, AA321719, AA310158, AA496901, W38648, AI301218, AA482788, AI287528, N43757, AL040462, D56053, AA077952, AA252763, AA516207, H68112, AL041368, AW271917, AA450199, AA577748, AI345522, AI357551, AA569202, AI344844, AI287787, AI561335, AI907884, AI913017, AL119438, AI149915, AI921649, AI378729, AA828696, AW304531, AA228329, AC005529, AC004854, AL096701, AC003035, AL035400, AC007688, AL109984, AC006285, AC002430, AC016025, AC007384, AC006273, AC005086, AL033539, AC005089, AC005527, AC000025, AC005288, AL121694, AC002991, AC005971, AC004794, AC000076, AC005399, AC005839, AC018769, AF148319, AC006996, AL031577, AC005531, AC004098, AL117258, AC004531, AC004386, AL109827, AP000502, AL021808, AL021707, AC006449, AC002480, AC006476, AF196779, AL021546, AL049757, AC007546, AC005062, AC007021, AF128893, AL031281, AC006013, AD000090, AL034349, AL050325, AL031685, AL034420, AL133382, Z86090, AC006509, AB017654, AC004076, AC003041, AL050341, AL080242, AP000692, Z83849, AC009501, AC005264, AC003046, L78833, AC005324, AC006012, AC008033, AL132642, AF053356, AC004622, AL031255, AC005747, Z69917, AC003982, AC006208, AC002418, AC004966, L78810, AL035415, AC005932, AB003151, AC007199, U52112, AC007899, AL080243, AC005696, Z82198, AC006501, AC006130, AC008101, AC004916, AP000459, AC007226, AL096763, AL133371, AC007845, AC005914, AL049539, AC004596, AB023052, AL023513, AC007216, AL031650, AC004019, AC000015, AL034419, AC005746, AL132712, AL031280, AC010205, AL022237, AL034423, AC008079, AL049795, AC006064, AC004236, AC005409, AC004913, AP000128, AP000206, AC010197, AC007878, AC006511, U73168, AC003958, AC005940, AL034429, AL008629, AC000134, AL035407, AC004491, |

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| HLMNL08 | 2767 | 1 - 402 | 15 - 416 | AC004975, AP000215, Z93783, AC004895, AC002554, AC005049, AC002116, AC005837, AC004099, AC005225, AL022721, AP000474, AC002476, AC007030, AC012599, AL022336, AC005786, AC003667, Z84480, AP000704, Z83822, AP001051, AC005019, AC002565, AL023803, AL022316, AC006111, AC002470, AC004534, AC002064, AC005193, AL033527, AC002485, AL049780, AL133304, AL031848, AI024498, AF107885, AC006530, AC005209, AL034417, AC004152, AF027390, AC000021, AC000022, AF164343, AL033533, AC020663, AC007707, U62317, Z85987, AC004542, AC002350, AC005944, AC007327, AL110114, AL110502, AL023807, AC004478, AF030453, AC005498, AC007228, AC005536, AL049779, AC005879, AC006041, AL034350, AL035681, AC002984, AC006055, and AL031053. |
| HLMNL23 | 2768 | 1 - 323 | 15 - 337 | AW291682, and AW084373. |
| HLMNL55 | 2769 | 1 - 268 | 15 - 282 | |
| HLMNL57 | 2770 | 1 - 132 | 15 - 146 | |
| HLMNL64 | 2771 | 1 - 296 | 15 - 310 | AW237905, AI279417, AL137946, AW327852, H93152, N59744, AI284543, AI933111, AI915081, AI284092, T56025, T08386, H79586, AI798313, AA807579, R83068, AA584484, AI251944, AI890862, AI524022, AL121130, AI251034, AA878407, AA010973, AA302978, AI419337, AI280574, AI361090, AW128881, AI859906, AI358712, AI421950, AI884861, AA610255, AA365980, AI859438, AW410481, AL046416, AW026305, T07225, AA378474, AA834764, AW188791, AI254770, AI254508, AA372736, AI188049, AW090629, R49266, AA683091, AA350406, AA371410, R88803, AA215585, AW247389, AA047849, AA636102, N47855, AW132097, N52323, N33851, AI914713, AW265688, AI254798, AA343894, AC004099, AP000301, AF039906, AC005046, AL008718, AP000208, AC005188, AP000247, AJ246003, AC004841, AC012085, AP000045, AC003957, AP000509, AC004821, U85195, AP000692, AC006088, AL121653, D84394, AL096702, AL035072, AC006323, AC004777, AP000556, AF109907, Z82190, AC005409, AL023513, AC004770, Z98200, AL022396, AC004228, AC002045, AC004814, AC005317, AL121658, Z97056, AC002404, AC002326, AC004477, AL050343, AC006948, AL035461, AL031985, AC003692, AC004858, Z75887, AC000052, U91323, AC005280, AC006953, AC005288, AF015720, U80017, AC018725, X51956, AL008583, Z84466, AC007993, AC007228, AC000085, AF196969, AC002039, AC004656, AD000092, AC004019, AC005378, Z83840, AC005740, AL031281, AL049576, AL133246, AL020997, AL035086, AC002369, AC004999, AC005156, AL109963, AC005067, AC006511, AC004129, AC004796, U91318, AL009031, AL022238, AL021879, AP000553, AC002476, AC005484, AL023807, AC007376, AL031622, U93305, AC005538, AL133382, AC005924, AC005089, AC009516, AC006577, AC002477, AL049780, AC003956, AC007450, AC007214, AC006441, AL117330, Z83826, AC004983, AC006958, AJ229041, AL050348, AL031594, Z93020, AC007157, AC005095, AC006040, AF031076, AL034418, AC002551, AC005180, AC006312, |

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| HLMNM19 | 2772 | 1 - 428 | 668746 | 15 - 442 | AF217403, AI009051, AC007899, AC006557, AL080317, AL034423, AC009247, AF030453, AL024493, AC006059, AC005274, AC004623, AL031589, AC004844, AC002316, AC007934, AC004585, AC004706, AL080243, AC007066, AL021393, AP000130, AC003026, AL009172, AL008639, AC005972, AC009248, Z82215, AC005037, Z98949, AL049843, AC004583, AC006538, AC005772, AC006947, AL031659, AL035455, AC004383, AP000065, AC005213, AC004884, AF111168, AC004950, AL049871, AC008372, AC004097, AC005316, AP000696, AL049830, AL049793, AC005102, AL022327, U95740, AC005881, AC006362, AC004804, AC007406, AC006241, AL049759, AC007381, AC005233, AC007666, AC004629, AF003626, AL035681, AC002381, AC004386, AC002994, AC005726, AC004854, AC005291, AC006468, AC002425, AL035659, AC006000, AC005391, Z93023, AC005088, AC004859, AL022476, AC007308, AP000103, AC006160, AC006277, AC012627, AP000359, AC004967, Z83844, and AC004526. |
| HLMNM39 | 2773 | 1 - 437 | 577649 | 15 - 451 | AC007240, AB000876, AC004181, Y14768, AP000505, AB000882, and AC006011. |
| HLMNM44 | 2774 | 1 - 187 | 577106 | 15 - 201 | AA532744. |
| HLMNM61 | 2775 | 1 - 342 | 575889 | 15 - 356 | R44592, AI284595, AA572975, AA017690, H71585, AA744272, AI611440, AA515224, AA743966, AI859469, AA243452, N25037, AA601270, AA807579, AI356264, AI040051, AW275674, AL033518, AC004787, AC003081, AC002395, AP000130, AF196779, AP000247, Z83840, AF130343, AC004150, AC001228, Z95115, AC006021, Z97876, AC005696, U95743, AL117694, AC004890, AC006484, AC006512, AL096791, U47924, AL034420, AC005899, AC003037, AL022238, AL109827, AL022316, AC006539, AL049757, AC002544, AC012083, AC002059, AC005874, AF134471, AL132712, AP000553, AC006023, AC009516, AC005353, AC006239, AC005081, AC004963, AL135745, AC012384, AF001548, AF106656, AF053356, U07563, AP000475, AC007666, AL121658, AL121653, AC020663, AC007114, AP000008, AL133448, AC005370, AC004079, AC000026, AC007011, AC005233, AC005488, Z82203, Z85986, L48038, AC007055, AL135783, AL035659, AC004859, AC004821, AC007156, AL096701, AC006146, AL031681, AC005064, AC004955, U95742, AC004989, AC003015, AC004983, AF059675, AL022320, AC007193, AC004816, AF001550, AF190465, AC016025, AC006380, AC004258, AC004895, AC006362, AL021546, AC005330, AC004909, AC005399, AC005157, AP000501, AC005952, AC005015, AL008582, AC004583, AC005668, AC002070, AC005786, AC004885, AC002477, AC008123, Z81450, AC004643, AL050318, Z93783, AC006261, AC004013, AL117352, AL022326, L29766, AC005841, AP000472, AC005971, AC007216, AC005755, AC004408, AC004662, AC005225, AC004655, AF019413, AC006978, AL031594, AB023054, AF111168, AC005484, AC005202, AC005291, AC004921, AC006014, AC005180, AF165926, AP000031, AF064861, U91326, AC003689, AC006948, AC006042, AC007686, Z86090, AC006480, AL035451, AC008372, AC005562, Z93018, AC005837, and AL021977. |

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| HLMNN02 | 2776 | 920296 | 1 - 387 | 15 - 401 | |
| HLMNO52 | 2777 | 968377 | 1 - 539 | 15 - 553 | AA669135, AI659453, AA744875, AI418094, and N86865. |
| HLMNQ35 | 2778 | 575906 | 1 - 339 | 15 - 353 | AA115833. |
| HLMNT27 | 2779 | 752366 | 1 - 290 | 15 - 304 | |
| HLMNT62 | 2780 | 745733 | 1 - 240 | 15 - 254 | |
| HLMNU73 | 2781 | 577693 | 1 - 443 | 15 - 457 | |
| HLMNW94 | 2782 | 577157 | 1 - 382 | 15 - 396 | AA077367, AA678404, AA631482, H11448, AI018726, AW075863, AI439045, AA627180, AW080061, H57324, AA767864, AA078225, AA809049, AI751049, AA613450, AI21659, AA643451, AA806116, F24531, AI369076, AI690497, AA558404, AA657910, AI732243, AA603432, AI903464, AW084152, C05882, AA838162, AA774006, AI537814, AA706845, AA429481, F31203, H69179, AA658018, AW409692, AA507526, AW060227, AA640252, AW074839, R33826, AI694178, AA683154, AA372881, AI251576, AI634187, AA720750, AA985145, AW117831, AA728890, AI306232, AA482786, AI457313, T98651, AI339302, AI583466, M60806, AC007225, AC005412, AC006050, AF042084, AC000050, AL031681, AL022336, AC009363, AF111167, AC008008, AL023575, Z82976, AC005245, AF031077, AC004152, AR060471, AC005295, AL031427, AC007205, AC004975, AC005839, AL079301, AL031602, AC004662, AC007227, AJ251973, AC005006, U65406, AC004856, AC009247, AL096791, AC005231, AC002040, Z67997, AC007421, AI022166, Z83820, AC006312, U29953, AC004596, AC004134, AC004983, AC008119, AC009399, AC005740, Z68226, AC004878, AL049697, AC002550, AC004143, AC003109, AL021368, AC005355, AJ006998, AL133241, AL121769, AC004019, AC006480, AP000967, AL031670, AC007676, AL021937, AC004962, AF200465, AC005399, AC008012, AC018725, AC006512, Z82097, AC004967, AL008734, AC005902, AC006597, AL009182, AC004016, AC004796, AC003964, AP000547, AL009181, AC005747, AC006581, AC007040, AC007312, Z93023, AC005615, AC002036, AL078581, AL022098, Z85986, AL031735, AC005670, AP000354, AC006112, Z82172, AL132777, AL049874, Z85988, AB020860, AL031735, AC005089, AC006014, AC005514, Z82198, AC005895, AC005071, AC006211, AL049631, AF002223, AC004447, AF170815, AC004007, AL049557, AC003687, AC007993, AC007968, AC004492, AC004030, AC006084, AC005838, AJ000219, D89927, AC002400, U02047, Z92542, AC004535, AL031588, AC003686, Z81450, AC004820, AC004652, AC006505, U91321, U95740, AB023049, AL033547, AC006388, AC005202, AF121781, U73169, AC006213, AP000228, S83170, AF196969, AF031075, AC006160, AC004528, Z95116, AL035079, AL022316, M37468, AC005863, AC005548, Y11107, AC004798, AL096755, AP000140, AC005488, AL078583, AC005924, AL031053, AL021878, U52112, AC006205, AC007435, Z69667, AC004589, AC002310, U63630, AF146367, Z99755, AC003104, AF124523, AC008928, AL049795, Z97056, AC004896, AL035045, AC006208, AC006441, AC003070, AP000088, AP000513, AL117344, AD000092, AF001552, U51022, AC007899, S77764, AP000694, AC004485, AF001549, AC005036, AC005621, AL049861, AC009248, |

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| HLMNW96 | 2783 | 1 - 303 | 15 - 317 | AC005829, AC005694, AL121825, AC002978, Z82188, AL022318, AC007226, AF030876, Z82245, AC002492, U73647, AC007229, AC002389, AC004253, AC004099, AL049636, AL024498, AC005387, AI080242, Z81365, AC005793, AF193805, Z84469, AB015355, AL008582, AF050154, AF036405, AL133382, AL035249, AC005180, AP000403, and AC002549. |
| HLMNX15 | 2784 | 1 - 283 | 15 - 297 | AC005786. |
| HLMNX33 | 2785 | 1 - 409 | 15 - 423 | |
| HLMNX74 | 2786 | 1 - 390 | 15 - 404 | |
| HLNSF63 | 2787 | 1 - 373 | 15 - 387 | |
| HLNSG27 | 2788 | 1 - 445 | 15 - 459 | N62681, AW294240, H52686, AA084683, R00069, H73623, R97012, and AC004263. |
| HLTAA66 | 2789 | 1 - 296 | 15 - 310 | AA360344, and N43168. |
| HLTAA94 | 2790 | 1 - 263 | 15 - 277 | AA360440, and AA360442. |
| HLTAI12 | 2791 | 1 - 880 | 15 - 894 | AA902933, AA041224, AI078764, AA252233, AI373074, AW389244, AI141267, AI218278, H48161, AA235335, R76651, AI243996, AA360624, H49948, AA234675, R55221, AA011520, AA361876, AW021446, N63621, and R55222. |
| HLTAI56 | 2792 | 1 - 305 | 15 - 319 | AA360647, and AA361867. |
| HLTAL59 | 2793 | 1 - 294 | 15 - 308 | AA360498. |
| HLTAR67 | 2794 | 1 - 325 | 15 - 339 | AA360891. |
| HLTAR90 | 2795 | 1 - 507 | 15 - 521 | AA360930, T50676, F35684, AA302978, AA652868, AA878140, AA604550, AI912401, AA568204, AA570740, AA483606, AI143653, AI583142, AA846923, AA643770, AI362442, AA302661, AA297006, AW304699, AA502498, H84412, AI185394, AC002470, AC005529, AF001552, AC005324, AC005280, AF109907, AP000134, AL035400, AC004966, Z98304, AC005520, AC008072, AC002492, AC007308, AL049569, AC005081, Y18000, AP001052, AC006530, AL133246, Z95152, AC004858, AC002480, AC005821, AC003080, AC007327, AC005516, AC003082, Z97053, U91326, Z99127, AL050312, AC004383, AC012384, AL022316, AL031321, U96629, AC005913, AL050348, AL031230, AP000208, AC007051, AF053356, AL035405, AF088219, AP000503, AF134726, AC004531, AC004796, AC002429, AC004692, AC006001, AL049776, AF196971, AF038458, AL049759, AC005730, AC005874, AF134471, AP000212, AF030453, AC004622, AC000353, AC006261, AL050318, AL022313, AC006111, AL021453, AL049538, Z98884, L44140, AC004263, AC005180, AL096791, AC008273, AC004253, Z98048, AL023803, AC007686, AL022320, AC007637, AF111168, AC006040, AF111169, AL139054, AC005839, AL031291, AC007993, AL031295, AC009516, AC005755, AC004805, AC005231, AC007225, AB001523, AC002558, AP000113, AC005089, AC005822, AL022165, AC005041, AC007204, AP000088, AC006539, AF196970, AC003101, AL121603, AL022311, AL035086, AC007151, AP000359, AC005360, AL096701, AL049872, AF047825, AL034351, AC005189, AL034549, AC004644, Z83822, AC002565, Z93017, AC004854, |

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| HLTAT22 | 2796 | 508592 | 1 - 314 | 15 - 328 | AC004098, AP000228, AC006597, AC004668, AC020663, AC005488, AL031680, AC004876, AC009044, AC000134, AL031432, AL022067, AC005412, AC004542, AC004491, AC007664, AC002094, AC006026, AC007371, AC005086, AC004526, AC002072, AC002477, AC004851, AL049780, AP000140, AC002544, AC004859, AC000350, AC004382, AC006312, AC008115, AC005625, AC005914, AC006480, AC004964, AB020868, AC004882, AF024533, D87675, AF196779, AP000298, AC006064, AI049843, AI022736, 783844, AI096678, AC002425, AC006088, AL031279, AF039906, AC002997, AC008044, AL021155, I34294, AC003110, AC003663, AL117694, AC007676, AF196969, AC004584, AC006241, AC006388, AC005920, L78833, AC006101, Z98051, AC004797, AJ003147, AC002316, Z83826, AC004821, AC005082, AF030876, AL031685, AC005531, AC005844, AL034548, AI079342, AP000704, AC004150, AC007055, AC005736, AC007226, AC004752, AC006125, AC006305, AL022329, and AC006254. |
| HLTAT93 | 2797 | 575133 | 1 - 360 | 15 - 374 | AA360946, and AA361888. |
| HLTAU67 | 2798 | 703103 | 1 - 337 | 15 - 351 | AA360810. |
| HLTAW36 | 2799 | 536674 | 1 - 289 | 15 - 303 | AA361018, AA361017, R58095, AA332883, R57856, and AF023244. |
| HLTAW69 | 2800 | 753707 | 1 - 585 | 15 - 599 | AA361102, AI440178, AF039235, AA315994, AI916936, and AA358918. |
| HLTBL46 | 2801 | 508925 | 1 - 494 | 15 - 508 | AA361122, and AI433714. |
| HLTBN29 | 2802 | 703295 | 1 - 452 | 15 - 466 | AA361407. |
| HLTBO49 | 2803 | 839804 | 1 - 345 | 15 - 359 | AA361696, AC003026, AL109613, AL121653, AI109758, and AC005378. |
| HLTBU04 | 2804 | 928005 | 1 - 430 | 15 - 444 | AA361716, AA361734, C14792, C15837, C15309, C14683, C15809, and AC005670. |
| HLTBW51 | 2805 | 522881 | 1 - 340 | 15 - 354 | AC004990. |
| HLTBX34 | 2806 | 856609 | 1 - 244 | 15 - 258 | AA361956. AA362009, AA339932, AA507975, AI921692, AA230221, AA610255, AI274006, AI567831, AI445768, AI340858, AA586553, AI889648, AI613487, AI336206, T08386, AA774119, AA470490, AA362440, F16409, R79396, AA828613, AI434103, AW407007, AI124558, H01852, AI114645, AA358531, AA829693, AL038842, AA525238, AA112864, D25667, AA655037, AL134332, AA523718, AI744890, AI744381, R48980, AA661554, AW169469, AA157876, AI752977, AI554399, AA046906, AA446574, AA446931, AI636422, AA828840, R64110, AA729004, AI620354, AW338633, AW070901, AA640661, AA657544, AL038841, AA551030, AI078143, AW028376, T16147, AA468289, AI732682, AA196287, AA010265, AA654464, AC004922, AC003092, AI031118, AC002310, AC006088, AC005602, AC005003, AC006449, AC005520, AL049562, Z82246, AA005920, Z82182, AC003688, AC004674, AC004242, AC006001, AC005971, Z82203, Z99716, AC005924, AC005822, AB014532, AC008115, AL121653, AF196779, AC006441, AC005696, AL023807, AC009248, AL031295, AC004491, AL022318, AC005391, AL024498, L44140, AC007066, AC007934, AC007229, AC003037, AL031848, AC005598, AC007201, AC007314, Z98044, AC005747, AC005519, AC012627, AL035681, AL035587, AC006160, AC005399, AL139054, AL031577. |

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| HLTCL66 | 2807 | 417344 | 1 - 404 | 15 - 418 | AC005753, AL023880, Z97056, AF111169, AL022316, AC004686, AL132992, AC004765, AL133448, AF088219, AC007376, AC005261, AR036572, U91328, AC005015, AC005253, AC004025, AC004019, AC000046, AC000038, AC005744, AL117329, AL109827, AC004913, AC005618, AF111168, AL031670, AC005785, AC005200, AC004816, AP000689, AC004832, AL022320, AL035411, Z83820, AC005368, AP000553, AC005280, AC005516, Z98048, AL080243, AP000514, AP000510, AC004263, AC005049, AC004262, AC000353, AF107885, AC000025, AC003029, AC000041, AC005911, AL049650, AL034451, AC004477, AL031575, AC003046, AC003102, AL049569, AC006511, AL031591, AB023048, AP000512, AC004668, AL136363, AB019438, AC006261, AL049761, AC002477, AC005225, AC009464, AC002456, L78810, U18270, AL023879, AC002991, AC006101, AC007537, Z98749, AL008721, AF001549, AC005695, Z74619, AC006959, Z82198, AL049869, AP000704, AL049743, AC005365, AC000048, AF038458, AC005011, AL133245, AC007686, AL031681, AF011889, U91318, L34079, AC004812, AL049781, AC004067, AC007308, AL009179, AC006130, AP000065, AC006121, AL080317, AC007421, AC007207, AP000210, AP000132, Z96074, AL021154, AL020997, AC005914, Z86090, AP000555, AL008582, AL023798, AC006251, AJ243213, AC002553, AL122020, AC004893, AC004682, AC005531, U91323, AB003151, U91327, AL022067, AF001550, AC005013, AL109956, AC004876, AC002418, AL078638, AL034420, AC005755, Z95114, AP000513, AC005527, AC004156, AF023456, AL031005, AC002369, AL110502, AC006162, AC007051, AF195658, AC004386, AC005993, AC003007, AC005632, AC003982, AL096791, AB023049, AC007919, AC002546, AC005099, Z69374, AP000557, AL121595, AC004783, AC003086, AF109076, AL031666, AL031177, AC004051, AC007216, AC006538, AC005089, and AC005358. |
| HLTCM12 | 2808 | 888630 | 1 - 346 | 15 - 360 | AA845560. |
| HLTCQ51 | 2809 | 725845 | 1 - 660 | 15 - 674 | AA361368, and AA361192. |
| HLTCR55 | 2810 | 839556 | 1 - 576 | 15 - 590 | H90265, N92020, T85748, AA477719, and H56560. |
| HLTCT75 | 2811 | 766511 | 1 - 337 | 15 - 351 | W32922, and AI814997. |
| HLTCU58 | 2812 | 625309 | 1 - 352 | 15 - 366 | AW451945, AA926743, AA361764, AI082182, AI653128, AI873281, AA608839, AI610135, AW367467, and AB013038. |
| HLTCV43 | 2813 | 715525 | 1 - 355 | 15 - 369 | |
| HLTCV57 | 2814 | 535289 | 1 - 185 | 15 - 199 | |
| HLTCV63 | 2815 | 574712 | 1 - 189 | 15 - 203 | |
| HLTCZ25 | 2816 | 574704 | 1 - 110 | 15 - 124 | AW134673. |
| HLTCZ37 | 2817 | 574705 | 1 - 413 | 15 - 427 | |
| HLTDC32 | 2818 | 574699 | 1 - 274 | 15 - 288 | |
| HLTDC80 | 2819 | 574698 | 1 - 353 | 15 - 367 | |

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|---|---|---|---|---|
| HLTDD44 | 2820 | 1 - 146 | 15 - 160 | AA362014, and AF053630. |
| HLTDD62 | 2821 | 1 - 263 | 15 - 277 | AL034343. |
| HLTDE78 | 2822 | 1 - 293 | 15 - 307 | AL096816. |
| HLTDK54 | 2823 | 1 - 302 | 15 - 316 | |
| HLTDK64 | 2824 | 1 - 325 | 15 - 339 | AA884484, and AC007068. |
| HLTDL71 | 2825 | 1 - 242 | 15 - 256 | AA361503, and Z96050. |
| HLTDT14 | 2826 | 1 - 296 | 15 - 310 | |
| HLTDY57 | 2827 | 1 - 535 | 15 - 549 | |
| HLTEA13 | 2828 | 1 - 669 | 15 - 683 | AF118078. |
| HLTEE40 | 2829 | 1 - 221 | 15 - 235 | AI904944, AA326452, AA135988, AA857812, AI779421, AA878407, N70449, AA831801, AI798041, AA714073, AA320105, AI419337, AI361090, AA302978, N23919, H93152, AA371410, C14330, AA577824, AA626829, AI421950, N75708, AW089550, AA832016, D51877, H67064, AA279385, AI114557, AA017690, AA326904, AW026305, AA719111, AA135811, C16358, AI914713, H43183, AA296604, AI270120, AW019964, AI886736, AI908508, AA092704, AW381198, AW381196, H79586, AA586433, H71738, AI054244, AI671077, AI431513, AA021139, AA381762, AA828867, R83068, AI609972, AL040430, AI580707, AW079809, AI583344, AI908525, AA828047, AI865776, AA558404, AA553570, AA338623, AI791718, AA862029, AA610255, AI192463, AW163763, AA364420, AA367788, AW089783, AA569597, AL041375, AA077776, AI797998, AA102737, AA324088, AI283938, AI185394, AI819391, AW390309, AW247389, AA854460, AI279417, AW265279, AA728861, AI538818, AA745543, AI889579, AL120976, AA385775, T60699, AA326330, AW265276, AA553900, AA565319, AA228778, AA152253, AI423018, AA834799, AI679413, AA487569, AI349130, AA608520, AA493789, AI445373, R67701, AI889705, T93109, AA937809, AA136477, AW002831, AA730488, AW008184, AA525331, AA502098, AI609574, AW340937, AA847413, AW300749, AA745628, AA365980, AA658934, AA378474, AA805573, AA384911, AI696550, H91704, AI310670, AA074351, R93854, AI927393, AA593471, AA493447, AL118925, AI750125, U85195, AE000658, AF047825, AC005086, AP000350, AF038458, I34294, AL023807, AC002400, AC006011, AC005971, AC005484, AC006511, AL022721, AL031427, AC009247, Z98047, AC006344, AC004883, Z83845, AC007384, AP000704, Z97181, AC004707, AL022320, AC006449, AC004882, AL049843, AC002425, AC004905, AC018633, Z73359, AC006996, AC005215, AL121653, AL034420, AC004263, Z93930, AL133382, AP000008, AL109952, AC004966, AP000504, AL031589, AL139054, AL049548, AC004881, D87675, AC002395, Z82206, AC007774, AL031230, AC005529, AF111168, AL049694, AL035072, AC006160, AC005081, AL049845, AC005630, AC004797, AL050350, AC007055, AC005015, Y15994, AL008635, AC007676, Z98051, Z82976, AC004884, AL035460, AC007637, AL049776, AP000030, AC008928, AC005602, L47234, AL096703, AC005306, AC006132, AC007160, AC002316, AC005476, AC005924, AL121603, AF129756, AL133246, AC007160, AC002316, AC005476, AC000075, AC004471, |

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|---|---|---|---|---|---|
| HLTEF24 | 2830 | 1 - 135 | 871203 | 15 - 149 | AB023049, AC004880, AF111169, AL031666, AC002073, AC003688, AL121652, AP000212, AP000134, AC007878, AP000251, AC006130, AC005519, AC004975, AC005071, AP000553, AC005664, AL132777, AF106656, AC003030, AC005690, AC007308, AC005759, AC004382, AC002543, AL034423, AP001138, Z94161, AF207550, AL031662, AC005345, AL022476, AL031311, AL022318, AC005274, AC004025, AC002430, AC002128, AC002470, AC005777, AF024534, AC005221, AC005412, AC004025, AC000052, AC005037, AC005599, AC005261, AC007395, AC004913, AC005057, AC007880, AC005514, AC005291, AC004821, AC005914, AP001051, Z98036, AF030453, AC004526, AC007051, AC004812, AL031985, AL022313, AL132712, AC005372, AL023575, AC005091, AC005837, AL031678, AC002477, AF196779, AL133245, AC004785, AL135879, AL121790, AC007919, AL035405, AL031393, AC007227, AC004753, Z98747, AL024498, AL049793, AC005696, AC006538, D28126, AP000065, AL031846, AC016025, AC002375, AC004900, AC004217, AC004819, AL049781, AC007656, L78833, AL031228, AC005088, AC016027, AL033525, AL021391, AC004605, AC004019, AP000114, AL117693, Z93783, AF067844, AL031295, Z83844, AL031286, AC000379, AL049745, AC007934, AD000091, AC016830, AC005067, AL031283, AC005730, Z98884, AC006547, AC006480, AC002369, AL022302, AC007030, Z83856, AC006120, AC005695, AC005180, AL031685, AC006473, AC004000, AL031657, AF134726, AC005874, AF134471, AC000025, AP000512, AC005011, AP000432, AC000432, AC005624, AC003966, U82828, AC005796, AL096701, AC004895, U07562, AC006241, AC004130, AL049779, Z69890, AL034429, AL050308, AF045555, AD000684, AC005606, AL135744, AC006367, AP000141, and AC007684. |
| HLTEI47 | 2831 | 1 - 588 | 720474 | 15 - 602 | AA826368, and L78833. |
| HLTEI53 | 2832 | 1 - 306 | 723405 | 15 - 320 | |
| HLTEK94 | 2833 | 1 - 348 | 793033 | 15 - 362 | R63716, AA160481, AI191227, H40386, H48636, AA199616, R97634, AA226153, AA503119, T10560, AI266133, N67592, T92445, AI923480, AA701121, AA665021, II58178, AA564859, AI049707, AA569187, AI923140, AI340500, AA084337, AW157326, AI281754, AA586441, AA713534, N58586, AA831388, T40617, AW340821, AA650434, AA713762, AA713933, AI400213, AC005514, AC005971, AC003051, Z86090, AC006965, AC006241, AC002115, AL023447, AC004990, AC007327, AP000297, D49685, Z95152, AC005940, AC004474, AL023579, Z69921, L48473, Z98050, AL031714, AB029900, AL034401, Z49154, Z82184, AC000094, AC003968, AC000081, AL109854, AL023879, AL023694, Z83819, AC004041, AC005600, AC005250, AF015416, AC003099, AC012599, Z99297, AC005006, D87009, AC004748, AL034402, AC006254, AP000884, AC007091, AC002460, AC003998, AC005969, AL022574, AC006318, AL035413, AC005245, AC016025, Z99716, AC007016, AC006285, AC006211, AC016025, AP000044, AP000112, Z60589, AD001502, AL021391, AL050031, AC004647, AC004076, AC003002, AL049552, AL109939, AC004638, AC007243, |

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| HLTEL11 | 2834 | 1 - 319 | 15 - 333 | AC004400, Z69917, AB020858, AF130343, L42240, AC004149, AC006026, D26067, L05367, AF151679, AP000294, D87015, Z81000, AF037338, AC005853, Z70688, AC000082, AC004257, AP001063, AL080238, AL049741, and AL022575. |
| HLTEL25 | 2835 | 1 - 231 | 15 - 245 | AA360683. |
| HLTEL59 | 2836 | 1 - 687 | 15 - 701 | AA664604, T77882, AI271985, AW084100, AA857812, AI421950, AC002511, AC002997, AL022316, AC003037, AL049776, AL049759, AC006538, Z98884, AF002223, AC006121, AC007193, AC007055, AC004878, AC005324, AC005512, AF196969, AC002544, AC004020, AC007182, AC005071, AC005971, AL133245, AC004148, U91326, AC007227, AC006449, AC005015, AC002316, AC005233, AI133371, D87675, AL080245, AL049872, AC005531, AC006064, Z68165, AC007066, Z83847, AC005913, AF030876, AC005399, AC003101, AC004491, AC006241, AC002310, AP000141, AC003029, AC007707, AC007216, AC005736, AC006111, AC009516, Z85986, AL096791, AF205588, AC005363, Z86090, AL050338, AL022320, AC005529, AC005057, AC016027, AC006013, AC005041, AF001552, AC004918, AC007308, AL031281, AC016830, AP000689, AC007075, AC005231, U91321, AL117337, AL049780, AL031311, AC004832, AC005237, AL008718, AB003151, AC003684, AC007226, AF111167, AC002425, AC004217, AC004644, AC002553, AI023575, AL022311, AC007151, AC005291, AC007546, AP000704, AC006464, AP000505, AC004821, AC007686, AC002470, AC004084, AL022238, AL031283, AC004859, AL109801, AL035422, AC003006, AF207550, AC002492, AC006071, AL033521, AC006023, AC004858, Z99716, AC005300, AF129756, AL035587, AL135744, AL034402, AL080243, Z98752, Y14768, AL139054, AC005667, AP000557, AC000159, AC005261, AP000113, AC007676, AL096761, AC004675, AC005562, AF165926, L78833, Z97053, U07563, AP000512, AC005412, AC007041, AC004686, AC002301, AP000130, AC004883, AC007993, D28126, AL033392, AC004531, AC003663, AL008582, AC005874, AF134471, Z83838, AC004209, AC005102, AP000208, AC005740, AC004895, AF088219, AL021546, AC004587, Z97054, AL121825, AC004887, AL049569, AC005004, AC004656, AC004967, AC005940, AC002039, Z84466, AC002477, AL031005, AP000556, AC002059, Z95114, AL021920, AL021578, AC005696, AC004150, AC006014, AL121658, D86992, AC006141, and AP000045. |
| HLTEO88 | 2837 | 1 - 321 | 15 - 335 | AI218868, Z45382, AI273004, AA018678, and AA814210. |
| HLTES50 | 2838 | 1 - 299 | 15 - 313 | AC006323. |
| HLTES59 | 2839 | 1 - 260 | 15 - 274 | |
| HLTEX10 | 2840 | 1 - 289 | 15 - 303 | |
| HLTEX38 | 2841 | 1 - 287 | 15 - 301 | |
| HLTEZ24 | 2842 | 1 - 456 | 15 - 470 | AA361279. |
| HLTEZ33 | 2843 | 1 - 344 | 15 - 358 | |
| HLTFA05 | 2844 | 1 - 539 | 15 - 553 | |

| Clone | SEQ | | | Accessions |
|---|---|---|---|---|
| HLTFA34 | 2845 | 1 - 202 | 15 - 216 | AI431786. |
| HLTGF04 | 2846 | 1 - 1580 | 15 - 1594 | AA813267, AW341552, AA878516, AA612649, AI935832, H17239, AA213623, AA720884, AI621368, Z44756, N74953, T75192, and R37793. |
| HLTGF55 | 2847 | 1 - 424 | 15 - 438 | AA705418, AA682828, N64118, AI940034, AA987277, AA340035, AA484366, AI982809, R60108, T90092, AA918258, AW337710, AA643794, AI348199, H02927, T63790, AC005538, AP000512, AC002394, AC007151, AL021707, AF207550, AP000295, AI008718, Z85987, AC008044, AL035458, AP000044, AP000112, AB023051, AC004448, AC002563, AL133485, AC007216, AC005071, AC007226, AC005291, AC004967, AC007425, AC005529, AI022476, AC007845, U08988, AC005666, AC007057, AL031681, AL022721, AL035090, AC006544, AC004779, AC004216, AL031390, AC008008, AC005163, AL109984, AC005377, AC022517, AC002997, AL121825, AL132777, AC005921, and AC004228. |
| HLTGG25 | 2848 | 1 - 296 | 15 - 310 | AC005037. |
| HLTGG61 | 2849 | 1 - 510 | 15 - 524 | |
| HLTGM60 | 2850 | 1 - 456 | 15 - 470 | |
| HLTGP51 | 2851 | 1 - 421 | 15 - 435 | AC004757, AC005962, AC004821, AL031985, AC004491, AL133500, AC004149, AC004895, AC007637, AC004671, AC005768, AL021546, AC004131, AC003108, AC016027, AC016830, and AP001054. |
| HLTGP63 | 2852 | 1 - 415 | 15 - 429 | H90456, AA284708, AA805701, AI380487, AA203607, AI810648, AI829784, AI765051, AI126802, and AI367405. |
| HLTGS44 | 2853 | 1 - 440 | 15 - 454 | |
| HLTGV54 | 2854 | 1 - 393 | 15 - 407 | AW205342, AA394225, AA398138, AI189026, AA283901, AI088021, AW196580, and AA504369. |
| HLTGV64 | 2855 | 1 - 399 | 15 - 413 | AA992324. |
| HLTGV67 | 2856 | 1 - 417 | 15 - 431 | |
| HLTGX26 | 2857 | 1 - 327 | 15 - 341 | |
| HLTGY75 | 2858 | 1 - 338 | 15 - 352 | AC004921. |
| HLTHC34 | 2859 | 1 - 411 | 15 - 425 | AC008062. |
| HLTHH89 | 2860 | 1 - 439 | 15 - 453 | |
| HLTHI11 | 2861 | 1 - 650 | 15 - 664 | AI246061, AA324919, AI801563, AI054090, AA838192, AI539822, AA419225, N27874, AL048479, AI284543, AI254770, AI251944, AI251034, AI251203, AI251284, AI250552, AA557911, AI673038, AI292275, Z97630, AC007688, AC007283, AL022311, AL034553, AL109628, AB003151, AL109758, AC005837, AC004955, AC005844, AP000689, AC003689, AC004531, AC003010, AC005808, AL020997, AC005531, AL008730, AC007263, AP000116, Z93020, AF001551, AL118516, AC003108, AP000049, AC007226, AP000311, AC006115, AC007738, AC003663, AC006251, AC007051, AC007051, AL049743, AC007934, AC002398, U95739, AC002301, AP000152, AC006449, AL109627, AC002091, AC002395, AC004234, U91321, |

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|---|---|---|---|---|
| HLTHJ35 | 2862 | 1 - 529 | 15 - 543 | AC007421, AC005014, AL021397, AL139054, U62631, AC007055, AC004834, AL080243, U73629, AC007363, AC005914, AL121658, AC004522, AC005152, AC007637, Z82215, AL049795, Z85986, AC005696, AL031848, AC005952, AC001231, Z85994, AC005274, AF068862, Z68870, AC007537, AC004612, AC007546, AC004558, AL096791, AL022326, Y18000, AC005971, AC006213, AL023281, AD001527, AC006509, AC004967, AL050341, AL031686, AF207550, AC005295, Z82245, and AL035683. |
| HLTHJ68 | 2863 | 1 - 282 | 15 - 296 | H48673, AA830499, and AA769512. |
| HLTHOI5 | 2864 | 1 - 241 | 15 - 255 | T55452, T55533, T64583, T86962, R17130, R43223, R69530, R88169, W16432, AA001405, AA010287, AA010286, AA039982, AA040629, AA262779, AA262859, AA429842, AA429866, AA280051, AA470454, AA535802, AA583001, AA602082, AA602149, AA568998, AA577257, AA738040, AA769367, AA814611, AA815126, AA826473, AA827081, AA878242, AA928604, AA932452, AA976602, F18808, AA654132, AA417049, AA417180, AA609614, AA724635, AA835419, AA838750, AA854117, AA854205, AA772546, AA868928, AA772706, AI002704, AI092675, AI092814, D19911, Z38531, Z42297, AA682392, AA699613, AI241962, AI249764, AI284418, AI368959, AI216755, AI399983, AI475899, AI566500, AI579914, AI125509, AI126523, AI128828, AI129502, AI143123, AI627758, AI168615, AI200776, AI620397, AI690783, AI701961, AI873590, AI805591, AI935907, AI951767, AW007590, AW009555, AI985824, AW024442, and AW082810. |
| HLTHO31 | 2865 | 1 - 251 | 15 - 265 | AL049610. |
| HLTHO46 | 2866 | 1 - 291 | 15 - 305 | AW173354, AF049559, AF049553, and AW386843. |
| HLTHS75 | 2867 | 1 - 470 | 15 - 484 | AA307492. |
| HLTHV83 | 2868 | 1 - 824 | 15 - 838 | |
| HLTI172 | 2869 | 1 - 493 | 15 - 507 | |
| HLYAA21 | 2870 | 1 - 703 | 15 - 717 | AA042852, AA044402, AI671077, AI801505, AA356376, AI828669, AA837771, AL042735, H54252, AA565232, AW272599, H43183, F31867, AA445908, AA904211, H53284, AA513884, AA662614, AI280266, AI355246, AA569715, AA552724, AW019964, AI246386, AI249688, AA374797, AA630245, AA584493, F35684, AI915081, AA058312, AW265688, AW302081, AI870453, AA493947, AA493789, AA586433, AL039309, AA284247, AA584484, W81372, W02749, AI612810, AA584800, AI580707, AI198718, AI923052, R93919, AI567391, AA811954, AI038304, AA728938, AI253987, AI282629, AI802804, AW051819, AL041352, AI754567, AI569100, AW192599, AA515351, AA658934, AI754105, AI755214, F33037, T69571, AI609972, R86977, AA302982, AA558404, H65213, AI080307, AI061619, AA937809, AA678472, AA557790, AA665181, AA746911, AW403829, AI310464, Z98474, T62078, AW419389, AW303142, AW275432, AI587467, AL079734, AI912401, AA376520, AI190648, AA349937, T95676, AA659048, AL034420, AC004822, AC004760, AC005859, AF112441, AC005534, AC004651, AL078603, AL049570, AC005206, Z69922, AC007546, AC004167, AC005667, |

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| HLYAA41 | 2871 | 909874 | 1 - 819 | 15 - 833 | AL117344, Z49769, AC003690, AC002302, AC005291, AL021546, AL024498, AC002504, AC002128, AC007676, AC005256, AL121852, AL031315, I34294, AL034379, AC004494, U02052, AC007880, U02047, AC007566, AP000501, U95739, AF108459, AL008709, AC007993, AC002511, AC007312, AF130343, AC004033, AL031665, AC006011, AC002375, AC009044, AF196971, AC005057, AF053356, AC002550, AC005921, AC006061, AC002045, AC006479, AL110122, AP000193, AC008101, AL035072, AC008044, AP000050, AL109613, Z95114, AC004466, AL109983, AC005514, AC007193, AC008079, AL035410, U17576, AP000117, AC071136, AP000313, AF207550, AC004858, AC006132, X55448, U52112, Z99716, AC002390, AL021306, Z49235, Z82214, AL035415, AC005500, AC005277, AC003035, AC006062, AC002429, AC006449, AL049631, AL008707, AC004000, Z82190, AC002404, AL035400, AL035423, AL021920, AB018295, AL031311, AC002039, AC005902, M29929, AL020997, AC006125, AC003098, AC011331, AP001052, AF031078, AP000049, AP000116, AC000039, AC005193, AC005411, AC016831, AC004843, AL021937, AC004859, AL049712, AC005539, AC004743, AL049829, Z98742, AF030876, AC004999, AL022163, AC006057, AC005726, AC005740, AL031121, AC005746, AC005823, AL049557, AF006501, AL031293, AP000311, AC003967, AC000159, AL049834, AC004584, Z84813, AC004797, AC004073, AF109907, L44140, AP001063, AC006088, AL031732, AF030453, AC004099, AL109656, Z82248, Z94865, AC005088, AF107259, AP000239, AC005876, AP000952, AL109839, AC006277, AC003109, M87918, AD000684, AL050318, AC007225, U10087, AC005081, AC005516, AC005726, AC007376, AC008062, AC002107, AC006398, AL049795, AC006050, AC004475, AL031433, U96629, AL031848, AC004024, AF017104, Z86090, AL078638, AC009263, AC007731, AF075098, L31565, AL035495, AC003043, AC002496, AC005480, AL109963, AB003151, AP001053, AC002090, AL117352, AC011718, AL031594, AC008041, AC002476, AC004223, AL031431, AF155238, AL022316, AF095901, U91318, AC005747, AC002106, AL009183, AL109801, AL050331, Z84469, AC005531, Y14768, AC006126, AC004922, AC004695, AC004921, Z98052, AC002301, AC004817, AC005037, Z84466, Z82217, AL118503, AP000552, AC004224, AC005034, AC002369, AL135879, AL121790, AL050337, AC000115, L47234, AC004605, AC007773, AL133396, AC005335, and AC006515. |
| HLYAA44 | 2872 | 964841 | 1 - 362 | 15 - 376 | AI074002, AW014573, AA326846, AI084046, AA070889, AW194509, H44725, AI241812, AI624543, W45039, AI273179, AI564245, AA903221, AI270448, AI923509, AI560536, AL045163, AI361701, AL039276, AI886440, AI476086, AI285732, AW085799, AW189802, A45787, E12888, AL122049, AL133607, AL133053, AL133049, AL133015, and AL133608. |
| HLYAB02 | 2873 | 920407 | 1 - 333 | 15 - 347 | R02835. |
| HLYAB38 | 2874 | 861161 | 1 - 444 | 15 - 458 | U81830, and AC007450. |
| HLYAC38 | 2875 | 668989 | 1 - 259 | 15 - 273 | AI243319, AI288451, AI521658, AW301143, AW444808, AI417213, AI056464, AI827213, AI925715, AI085752, AI91241, AA693938, AI869312, AI122654, AA937953, AI922008, |

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| HLYAD10 | 2876 | 964845 | 1 - 583 | 15 - 597 | AI394394, AI432336, AW451297, AI123244, AA736786, AI742610, AA522674, AA603325, AI425075, AI094469, N94395, AI742621, AI445367, AI420510, AI866676, AI963292, AA627433, AI356146, AA968590, AI872656, AI222629, AW167511, R69552, AI194056, AI803734, and Z38818. |
| HLYAE50 | 2877 | 576449 | 1 - 459 | 15 - 473 | |
| HLYAF20 | 2878 | 668872 | 1 - 715 | 15 - 729 | AA195902, D81936, AW373648, H72932, AW373647, AW373665, AA278187, and AA284401. |
| HLYAF28 | 2879 | 975007 | 1 - 633 | 15 - 647 | Z99396, AW392670, AL134920, AW372827, U46341, AW363220, AW384394, AI119355, AL119319, AL119457, AL119497, AL119483, AL119324, AL119443, AL119484, AL119363, AL119391, U46349, AL119341, AL119335, AL043029, U46351, AL042984, AI119522, AI142137, AL134531, AI142131, AL042975, AL042433, U46350, U46347, AL119444, AL042973, AL119418, AL037205, U46346, AL038520, AL037526, AL119464, AL036190, AL036268, AL036767, AL037077, AL037021, AL037027, AR060234, AR066494, A81671, AB026436, and AR054110. |
| HLYAG42 | 2880 | 691747 | 1 - 419 | 15 - 433 | |
| HLYAH26 | 2881 | 855981 | 1 - 569 | 15 - 583 | AW370369, AA825207, AI379831, AI224367, AW292092, AI832007, AI250843, AA825205, AI434322, AI250350, AW003249, AF110467, AF110466, AF137027, AF110465, AB025274, and AB018563. |
| HLYAK12 | 2882 | 970807 | 1 - 283 | 15 - 297 | |
| HLYAL83 | 2883 | 780075 | 1 - 469 | 15 - 483 | AI990837, AA630857, AA630888, AA907192, AI283022, AA318347, AI891038, AI821307, AA349881, AI951933, AW129165, AA487512, AI298557, AA776684, AA745570, AT749306, AA614647, AA492266, H96580, AA827080, W80853, AI135674, AI889426, AA302966, AI285709, AL023584, U92032, Z84489, Z77249, AC002477, AC004520, Z93023, AL023807, AL109963, AC006001, AL035071, AL021807, AC005057, AL109628, AL031577, AL096701, AC004841, AL133355, AL117354, AC005901, AC006084, AC004999, AC004985, AL109984, AL024508, AC004472, AL133353, AL132641, AC005225, AL031666, AC004129, U62293, AL109758, AL021578, AL033525, AL050318, AL133448, AL022320, AL008715, AL033527, AP000694, U89337, AC004531, AC004067, AC004820, AC006312, AL096791, AL049871, U85195, AL035450, AC005365, AL109952, U80017, AE000658, AB014079, AL133382, D26141, AC004500, AC004527, AC005320, AP000510, AL022329, AC006026, AC004836, AL080317, AC005011, AL132987, AF195658, L44140, AC007792, AL008718, Z98941, AF017104, AL117337, AL049745, AC004491, AC006241, AL133163, AF006501, AL034345, AL031587, AB023048, AL133245, AL109623, AC000379, AC004035, AC005362, AC007666, AC003026, AC004587, AC004217, AC004263, AC004196, AF205588, AC005393, AL022162, AL031277, AL034371, AC009330, AP000113, AP000045, AC005722, AC002365, AL031602, Z84484, AC006050, AC005200, AC012599, U95742, AC005089, |

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| HLYAO31 | 2884 | 698104 | 1-463 | 15-477 | AC007114, AL049709, AC004891, AL049712, AC006531, AL049830, AL049759, AC006139, U73167, U90094, AC007860, AC005385, AC004601, AL022721, AC006064, U91318, AC005874, AF134471, U63721, AF165124, AC007868, AC005220, AC006530, AC008040, AC002400, AL049570, Y14768, AR036572, Z84467, U91328, AP000131, AP000209, AC005231, AF111168, X14448, AC004938, AC007124, AC002126, AL050324, AJ246003, AC004905, AC000086, AC005764, AL109956, AC006004, AC005839, AC004817, AC005803, AC002425, AL049849, AC005971, AC005856, AL049780, AC007216, AC004647, AI109627, AC007880, AF129756, AC004858, U52111, AC002565, AL078584, AC007372, AL049837, AC005940, AL022163, AF111167, AL049553, AL080243, AC007386, AC004462, AL117258, L77570, AC004686, AP000555, AC007327, AL021917, AC003037, AC002369, AC007308, AC004815, AL117344, AL023284, AC005697, AJ003147, AC005670, AC005625, U96629, AC004914, AC004975, AL035249, AL031657, AL034417, AC003104, AC007429, AC007688, AC005363, U91323, and AC005082. |
| HLYAO67 | 2885 | 924042 | 1-699 | 15-713 | Z26982. |
| HLYAP10 | 2886 | 964748 | 1-418 | 15-432 | AI143897, AA028192, AW294571, and AC003963. |
| HLYAP26 | 2887 | 681892 | 1-462 | 15-476 | |
| HLYAQ80 | 2888 | 868396 | 1-615 | 15-629 | AI049909, AI828669, AA167506, AI678676, AC005049, AL049830, Z99127, AL139054, AC007308, AC003982, AC005331, AC005764, AC007565, AC006581, AL021578, AC006064, AC007637, AF047825, AL031431, AC006950, AC016027, Z92542, AC016830, AC004024, AC005015, AF111167, AC002565, AC005391, AL117354, AC009516, AC004560, AC004000, AF038458, AC005138, U91321, AC004587, AC002984, AC005778, AC005081, and AF165926. |
| HLYAT56 | 2889 | 935552 | 1-517 | 15-531 | |
| HLYAU29 | 2890 | 576596 | 1-502 | 15-516 | AI718516, AI763431, AI027846, AI631498, AI809845, AI971984, H87213, AI365352, AI383486, D25764, H87214, AI762280, and AC002112. |
| HLYAV80 | 2891 | 689969 | 1-691 | 15-705 | |
| HLYAW35 | 2892 | 780987 | 1-373 | 15-387 | AW449907, AW387328, AW387332, AW387333, AW387341, AC005332, and AC005562. |
| HLYAX61 | 2893 | 707248 | 1-332 | 15-346 | AC002480. |
| HLYAX85 | 2894 | 575868 | 1-379 | 15-393 | AI760371, AL117470, and AB023143. |
| HLYAY62 | 2895 | 825513 | 1-356 | 15-370 | |
| HLYAY65 | 2896 | 575863 | 1-309 | 15-323 | AI216626, AI807710, and AL031393. |
| HLYBA01 | 2897 | 916635 | 1-464 | 15-478 | AI370263, AI472733, R98652, T52997, AC004882, AC005529, AC005821, AL024495, AC004216, AP000260, AC005291, and Z84467. |
| HLYBA42 | 2898 | 871648 | 1-753 | 15-767 | T47732. |
| HLYBA72 | 2899 | 717644 | 1-462 | 15-476 | |
| HLYBA85 | 2900 | 575878 | 1-462 | 15-476 | |

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| | | | | 15 - 500 |
| | | | | 15 - 659 |
| HLYBA96 | 2901 | 575834 | 1 - 470 | |
| HLYBB50 | 2902 | 708624 | 1 - 486 | |
| HLYBB65 | 2903 | 866883 | 1 - 645 | AI820992, AW105729, AA744993, AI003988, AA635433, AA687542, AI049630, AA015948, AI572680, AI358513, AA862029, AI283938, AI445699, H86399, AA515924, AI302350, H27788, AA302978, AA526658, H47736, AA526659, AI282479, AI061313, AA364082, AI049504, AW079667, AI591134, AA244181, AI678476, AA715351, AA728861, AI254779, AI590404, AI123214, AI702049, N55076, AI805699, AA862312, F17537, AA573000, AI751191, F23221, AA297789, AA846014, AA218684, AW265468, AA084320, AI143653, AW129188, AI049680, AA018258, AA650528, AL047349, R93233, AI446336, F29968, AA300049, AI002863, AA636077, AI268818, AL138262, AI799421, AI032411, H91062, AI679759, AA807704, H91704, AA278496, AW192930, F08866, AI520925, N78600, F36200, AA832124, AW192518, AA604149, AA668421, AA768179, AL121039, AI150934, AA147521, H91358, AI310343, AA342238, AI619994, AI174703, F31811, AA130696, AA342626, AW243945, AW157128, H91672, AW410844, AI040051, AA598740, AW148821, H59856, AA769481, AI065043, AI254267, AA010265, AC005632, AF049895, AF001549, AC005031, AP000555, AF069291, AC006538, AF111168, AE000658, AL031295, AF088219, U80017, AC000353, AC004083, AC001643, AL049835, AC005288, L47229, AC005971, AC004033, AC005500, AL096701, AL035681, U02057, AL109956, AC005666, L47227, AC011456, AC005682, AC005913, AL109798, Z98051, AC004663, AL022316, AP000501, AL049757, AC005730, AC002991, L47222, AC004151, AP000469, AL080317, AC004897, AC005409, AF064861, AC005231, AC005157, AC004882, AC005856, AC005529, AC006162, AL079295, AL080243, AC008018, AC004216, AL133289, AC006536, AC005828, AC003688, AL035587, AC006360, U85195, AL031347, AP000503, AR036572, U91328, AL035420, AC009516, AC007993, AC004985, Z82172, AC005722, AC005081, AC004966, X89398, AC005696, AC003665, AL049776, AC005332, AC007055, AC004253, AF045555, AC004000, AL021578, Z74739, AC000159, AC004056, Z96074, AP000010, AL023799, AL031659, AF053356, AL022721, AL080242, AC005003, AC005972, AL121603, AC005209, AC005215, AC004851, AP000152, AC005373, AL031685, AL023801, AC005924, AC004738, AL109627, AP000557, AL021155, AC005726, AC006277, AP000552, AC005365, M63796, AC006271, AL035461, AP000065, AC007766, AC004132, AL096703, AC003098, AF134726, E15652, AC005527, AL050321, AL121754, AF112441, AP000153, AC005188, Z82206, AC006385, L78810, AC007899, AC007746, AC003007, AP000011, AC001551, AC005484, E15648, AL132712, AL049843, AF038458, AP000556, AC008055, AC007919, AL121825, AL031007, AC007242, AB023048, AL022476, AC005368, AC006344, AF165926, AC006014, AC003043, AF019369, AC002544, AF109907, AC007845, AC005213, AB020866, AC004230, AC007637, AC005952, AC005057, AL049766, AC006064, AL049694, AL109853, AC006333, AC004686, AC005488, AF111169, Z93017, AL050140, AC005859, |

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| HLYBD46 | 2904 | 575865 | 1 - 358 | 15 - 372 | AW089101, AA303007, AI290405, T49633, AA864603, AI382825, AW179306, AW179305, AW380254, AI042311, F17774, AA478355, AI468899, AA679936, AI732120, AI469968, AA680243, AA329995, AA829490, AA478297, AL119649, AC004894, AC004000, L78810, AL009181, AC005291, U51244, AC006160, AL031311, AL049759, AC009542, AC004492, AC004531, AL034379, AP000228, AL021453, AP000140, AP000088, AC004063, AF147304, AP000065, AC005800, AC004087, Z82206, AC005881, AC005740, AC002287, Z84474, Z83846, AB014078, AP000514, Z97989, AC005235, U37355, U37357, U37452, L07900, U73638, AC005783, AC006077, AC005377, AC004999, Z83826, AL031650, AC004838, AC008033, AL021978, AC007664, X95586, AF065396, AF129077, AC006388, AF038458, AL031282, AL031256, AC004167, AC003957, AL049692, AL020997, AL022316, AC007263, AC004882, AC009330, U82828, AC006160, AC007308, AF053356, AC005529, AB028964, AC004644, AC006473, AL080241, AL049757, AC004813, AL049745, Z98941, AL023805, AL133241, AL031228, AC006111, AL009183, AI109984, AI008729, AL117338, AC004004, AL022323, AC005833, AC005089, AC005041, AJ007973, AC007192, AP000223, AP001051, AL031905, AJ006997, AC005519, AC003071, AC004687, AC004491, AC006121, AL008629, Z97352, AC000087, AC005206, AC005667, AC008122, AC004983, AL024498, AC007226, AC005081, and U95090. |
| HLYBF47 | 2905 | 706517 | 1 - 417 | 15 - 431 | AA873012, and AA470597. |
| HLYBF75 | 2906 | 828077 | 1 - 527 | 15 - 541 | AA393103. |
| HLYBG18 | 2907 | 575872 | 1 - 465 | 15 - 479 | |
| HLYBH08 | 2908 | 856445 | 1 - 467 | 15 - 481 | AI076697, and AI076255. |
| HLYBH56 | 2909 | 733472 | 1 - 471 | 15 - 485 | |
| HLYBH91 | 2910 | 576793 | 1 - 464 | 15 - 478 | H85616, H86301, H86264, AW440976, AW236342, AI312149, AI358501, AA593060, AW072587, AW419262, AI291124, AI291268, AI537030, N27353, AA084070, AW148792, AW340922, AI824562, AA443390, AW338869, AI648558, AI003734, AA347927, AA632868, AI499094, AA059235, AL138455, AA664535, AA323749, AW193609, AI133262, AI282832, AW380074, H40410, AI625570, AA984263, H86305, AA136004, AI884487, T47739, AI676218, AA347930, H42075, AA243959, AI653886, AI339440, AA837740, AL133862, AA610786, AI192631, AI628288, R47245, AA846935, AA346454, H02631, H21449, AL135405, AA437402, |

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| HLYBI44 | 2911 | 728035 | 1 - 253 | 15 - 267 | AW238768, AW085740, AL137954, AI610607, AII44330, AI572560, H64560, AA325699, AI469624, AL041733, Z94865, AC006350, AF001549, AP000508, AC004947, AL033521, Z92540, D84394, AL109984, AC005968, AC004210, AC004982, AC004098, AC007565, AL121653, AL031009, AC007344, AC005746, AC004637, AC000092, AC005317, AL023575, AC006121, AF111169, AP001049, AC005031, AL109798, AP001050, U80017, U91328, Z70281, AL023882, AC004205, AC002364, AC006012, X66401, AP000460, AC006480, Z70288, AF108083, AC003014, AB020867, AC007390, AC002994, AC005486, AC004035, AC005362, AC002350, AC008064, AC004702, AL021938, AF003627, AP000142, AP000090, AL031848, AR036572, AC006128, AL049845, AC006965, AL117352, Z82198, AC005531, AC005379, U89335, U89336, AC002045, AC005081, AL109656, AL031258, AP000358, AC004259, AC004600, AL031664, AC006195, AL035659, AP000343, AC004743, AC007324, AC003663, AC005288, AP001046, AC008079, AC009336, AC008124, AL049869, AC002288, AC005803, AC002082, AC005003, AL035106, AL022316, AC007308, AC006211, AC005755, Z92541, AB009666, Z98257, AC003965, AC004496, AF007544, AP000230, AP000144, Z86061, AL031177, AL109967, AC007214, AC006111, AC006241, AC006251, U47924, AL049562, AF227509, AL031662, AC004851, Z93021, AC006251, AL080285, AF227510, AC004999, AL031296, Z82205, AC005670, AP000556, AP000552, AL110505, AP000517, AC004253, AC004775, AF003626, AL022397, AC007026, AC006597, AC003695, AC004562, AC004963, AC005291, AF060568, U02048, AC006597, AC005180, AC002091, AP000152, AC005231, AB023054, Z84490, AC005175, AP000252, AL035494, AF045555, AL022100, AP000212, AL035458, Z97054, AC007666, AL049873, AL031584, AC005324, AC005874, AF134471, AL096711, AC006030, AC004797, AC005944, AL008728, AL117351, AL022313, AC005837, AC007687, AL049696, AC005229, AP001068, AP000080, AC005694, U49740, Z69890, AC005550, AC004400, AC005565, AC006275, Z81308, AL031602, AC006456, AL021453, AL023799, AL049713, AC004913, AC004987, AL031666, AL021392, AC000003, AC007228, AC004972, AL031650, AL117344, AC006354, AL049712, AC007262, AC007535, AC016027, AC005815, AC007537, AC007182, AC016830, AC005873, AC004605, Z98750, and U51244. |
| HLYBJ10 | 2912 | 964752 | 1 - 464 | 15 - 478 | |
| HLYBJ42 | 2913 | 713845 | 1 - 559 | 15 - 573 | AA830761. |
| HLYBL92 | 2914 | 856419 | 1 - 1064 | 15 - 1078 | W87342, W87343, and AI797550. |
| HLYBM35 | 2915 | 625408 | 1 - 461 | 15 - 475 | N72584, F31792, AI950359, and Z97055. |
| HLYBN75 | 2916 | 757084 | 1 - 387 | 15 - 401 | AC007204. |
| HLYBN94 | 2917 | 670500 | 1 - 380 | 15 - 394 | |
| HLYBO53 | 2918 | 721377 | 1 - 416 | 15 - 430 | AC004056, AC007214, and AC007458. |
| HLYBR03 | 2919 | 924515 | 1 - 428 | 15 - 442 | AC004227. |

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| HLYBR41 | 2920 | 1-631 | 15-645 | |
| HLYBR83 | 2921 | 750318 | 1-481 | 15-495 | AI769511, AI692550, AW384109, AW384104, AW384108, AW384074, AW384071, AW384068, AW384073, AW384075, Z42260, AA768582, AI681360, and AL022067. |
| HLYBS12 | 2922 | 970795 | 1-651 | 15-665 | D78885. |
| HLYBT19 | 2923 | 668744 | 1-432 | 15-446 | W87923. |
| HLYBT64 | 2924 | 527687 | 1-433 | 15-447 | AI799856, and AA447275. |
| HLYBT69 | 2925 | 678175 | 1-452 | 15-466 | |
| HLYBT84 | 2926 | 575828 | 1-45 | 15-59 | |
| HLYBU28 | 2927 | 914702 | 1-418 | 15-432 | H66883, W03665, and AC007068. |
| HLYBU52 | 2928 | 727213 | 1-463 | 15-477 | |
| HLYBV42 | 2929 | 713837 | 1-298 | 15-312 | AI094626, AW204786, AI935606, AW246712, AA336176, H92959, AI433978, AW194509, AL039276, AL045163, AI635331, AL045620, AL039421, AI923046, AI289992, and AW082113. |
| HLYBW12 | 2930 | 970796 | 1-423 | 15-437 | |
| HLYBW35 | 2931 | 812692 | 1-634 | 15-648 | R98218, AA570441, AI636734, AA324059, AW245354, AI446259, AA324559, AA720582, AA326603, AI358928, AA663074, AW162750, AA654482, T05834, AI929796, AL039930, AA593471, AA158549, H65679, N25304, AW078909, H94979, AW088557, AA457504, AA485343, AI049709, AI732720, AI734119, AW238712, AA364082, AI473995, AA484191, AA825827, AI064786, T08258, AW192373, AC002563, Z83826, U91323, AC004796, AC005726, AC005585, AC004832, AL031767, AC005057, AL035422, AI031279, AI021578, U78027, AL035420, AC004905, AP000355, AC003684, AF196779, AC007899, AF196972, AL021154, AC002551, AL049776, AC004821, AC005274, AC004953, AC007685, AC005484, AC007421, AL078581, AC005796, AC005562, Z93017, AC007050, U91318, AC007386, AC005940, AC003692, AJ003147, AP000356, AP000555, AC006538, AC006441, Z85996, AF053356, AL049694, AL050350, L11910, AC003043, AC004491, AL008718, AC006530, AC008064, AC007055, AL035413, AC005529, AC005088, AC004983, AL049795, AL031774, AC010170, AC002425, AC005358, AC007011, AP000967, AC007388, AC005070, AC005696, AC002312, AC005900, AL050318, AL049709, AC002470, AL109798, AL031680, AC006271, AL050307, U91321, AP000359, AL031295, Z94056, AP000128, AP000206, AP000313, AP000501, AC007225, AL050341, AC004383, AP000104, AC008116, AL135744, AF129756, AC007546, AP000050, AL021155, AL132987, AP000466, AC006427, AP000113, AP000045, AC005667, AP000117, Z99716, AC005399, AP000245, AL022165, U96629, AC006312, AL133163, AC009509, AC005206, AC004526, AF200465, AC004477, AL049576, AC005180, AF107885, AL132642, AC007216, AC005531, AC005924, AC005839, AP000700, AC005971, Z97054, AL049843, AC003663, AL031447, AC005921, AC002369, AC007676, AF030453, AC007114, AL133312, AC006014, AC007695, AF104455, AC004985, AL031985, AC002525, AC008044, AC006101, AC002375, AC006285, Z92844, AC006211, AF017104, AC002091, AP000557, AC005225, AC007308, |

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| HLYBX77 | 2932 | 721086 | 1 - 335 | 15 - 349 | |
| HLYBX84 | 2933 | 754842 | 1 - 568 | 15 - 582 | |
| HLYBZ17 | 2934 | 577479 | 1 - 373 | 15 - 387 | AW130285, AI985694, AI979259, AI982610, AL022067, U08185, and AF084199. |
| HLYBZ23 | 2935 | 856430 | 1 - 398 | 15 - 412 | |
| HLYBZ60 | 2936 | 682675 | 1 - 264 | 15 - 278 | AC006064. |
| HLYBZ86 | 2937 | 856436 | 1 - 574 | 15 - 588 | AL120025, AA432256, AI167405, R50986, AI768683, and AI802893. |
| HLYCA76 | 2938 | 770107 | 1 - 384 | 15 - 398 | D30975, and AC005180. |
| HLYCA77 | 2939 | 677758 | 1 - 788 | 15 - 802 | AI510842. |
| HLYCC39 | 2940 | 710843 | 1 - 564 | 15 - 578 | H62775, H62835, AA397821, M77858, AL038842, AAS02532, AP000511, AL020995, AE000658, AL050318, AL109758, AB023050, AC007225, AF109907, AC009501, AC004211, AI010770, AP000512, Z84486, AC002310, AC005585, AC003029, AC004491, AC004832, AL031255, AL031848, AC006285, AL049780, AC000353, AC006312, AL049569, AL033524, AC005484, AC007314, AB001523, AF165926, AC006071, AC005081, AC006011, AC002059, AC004223, AC002126, AL121653, AC007686, AC006942, AC005911, AC002312, AC005846, AP000689, L47334, AL080242, AL035422, AC006930, Z97056, AC005046, AL009181, AC002300, AB003151, AC004049, AC005527, AC008498, AL009172, AC006251, AL031427, AL031311, AC005907, AC005225, AC007690, AP000691, AC004234, AC004883, AC007546, AC005529, AC005755, AL133353, AC005157, AC005520, AC002369, AC002316, AC005015, AC007055, AP000299, AL133246, AL049697, AC004985, AL021391, AC007899, AC005231, AL035588, AC002115, AP000553, AC009516, AF053356, AC006271, AC005231, AC004801, AC004778, AC004013, AC006088, Z93241, AC004542, AL139054, AC005971, AC005775, AC002314, AL022326, AL049709, AL049839, AC007540, AJ011930, AL049835, AC006077, AL133245, AC006211, AL133448, AC000404, AL050341, AC000025, AP000048, AL133163, AC005619, AC004228, and AL096766. |
| HLYCC65 | 2941 | 932727 | 1 - 493 | 15 - 507 | AA171788, AW118642, AB029006, AJ246003, and AL121658. |
| HLYCF12 | 2942 | 908532 | 1 - 361 | 15 - 375 | AI139999. |
| HLYCF46 | 2943 | 718930 | 1 - 526 | 15 - 540 | |
| HLYCF70 | 2944 | 741417 | 1 - 399 | 15 - 413 | |
| HLYCH10 | 2945 | 964354 | 1 - 370 | 15 - 384 | |

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| HLYCH15 | 2946 | 1 - 363 | 15 - 377 | R02835. |
| HLYCM68 | 2947 | 1 - 432 | 15 - 446 | AF070718. |
| HLYCP88 | 2948 | 1 - 380 | 15 - 394 | AA230096, and AA530904. |
| HLYCN75 | 2949 | 1 - 556 | 15 - 570 | |
| HLYCO31 | 2950 | 1 - 312 | 15 - 326 | AI370523, N23255, AA074026, N27657, R66922, AW085624, AA579437, AI114828, AA382130, AA190418, H64735, AA491864, AA488846, AI350460, AI765684, T24020, AI092694, AA405463, AI375472, AA443663, AA577770, AA174138, AI241173, M77904, AA338281, AA465689, N21546, AI127067, AI916406, AW103010, AA584123, AA436155, AA436281, AI587537, AA812684, AA583390, AI811345, AA906657, AI065029, AA715389, AI439045, AI278256, R70326, H75272, N53132, AA910215, AI052493, AA736485, AA461430, AA805014, AA205743, AL048023, T68597, N25819, AL031774, AL022171, AL133485, Z84484, AL022067, AC004021, AL049738, Z83855, AC005844, AL022312, AC004000, AC007676, Z93017, AC004583, M63420, AC005354, AC004264, AL035410, AC005088, AC005562, AC004231, Z84489, AL035413, AC000353, AL035420, AL137457, AC004861, AL021878, U73479, AC004560, AF107045, AC005387, AL031255, AP000068, AL031848, AC005544, AC007327, AC007842, AC006241, AC004223, AC004167, AL135744, U62293, U63721, AC005057, U46120, AC005253, Z82097, AL008635, AL009031, AC002326, AC004770, AC006017, AC004797, AP000502, AC005393, Z95329, AC005412, AP000501, AF196970, AC004382, AF141308, U93037, AC002116, AC007201, AC000086, X55448, AC006030, AC002369, AP000008, AC005049, AC006088, AP000704, AC005833, AC004585, AL031985, AL034419, AL034549, AL022316, AC002454, AC005988, AL022165, L11910, AC009263, L44140, Z49258, AP000350, AL118509, AP000510, Z84466, Z97054, AC004458, AL031681, AC004106, AP000564, L05367, AC004132, AC006084, AL109984, AC002477, Z98044, AC005225, U52112, AC005920, AL121652, AC005529, AP001053, AC006312, AD000813, AC004839, AC002420, AF045555, AC004876, AL031056, AC005081, Y10196, AC006043, AL035079, Z95116, AL133304, AL049745, Z49250, AF053356, and AL121655. |
| HLYCO66 | 2951 | 1 - 295 | 15 - 309 | AA918361, AI214209, AI820877, AI733217, AI346354, H65493, and AL031666. |
| HLYCO68 | 2952 | 1 - 485 | 15 - 499 | AW292970, AC004645, and AC006111. |
| HLYCP66 | 2953 | 1 - 651 | 15 - 665 | AA251713, AF080576, AA281037, T49826, T49825, and AC007041. |
| HLYCQ53 | 2954 | 1 - 680 | 15 - 694 | AL022098. |
| HLYCQ68 | 2955 | 1 - 355 | 15 - 369 | AI288307, AI186282, AA523891, C75540, AL037127, AI193168, AW407585, AA112924, AA458534, AA515631, AI613465, AA911520, AA001471, Z99943, AL031681, AC002364, AC005952, AC005670, AL033538, AC016027, AC016830, AC004955, Z83840, AL031848, AC005803, and AL050327. |
| HLYCR47 | 2956 | 1 - 824 | 15 - 838 | AW236220, T92688, and AA341978. |
| HLYCS15 | 2957 | 1 - 371 | 15 - 385 | |
| HLYCV49 | 2958 | 1 - 294 | 15 - 308 | |

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| HLYCW04 | 2959 | 615021 | 1 - 336 | 15 - 350 | |
| HLYCW13 | 2960 | 656827 | 1 - 366 | 15 - 380 | |
| HLYCW20 | 2961 | 669541 | 1 - 355 | 15 - 369 | |
| HLYCW62 | 2962 | 856443 | 1 - 1140 | 15 - 1154 | AA720682, AI824562, F19258, AA654627, AI493615, AA503947, AL040913, AW340844, AA650244, AA077817, AA228329, AI679782, AI886176, AA729264, AA551509, AA342958, AI205126, AI357551, AI929531, AW103769, AW162049, AA610491, AW008317, AI053816, AI054246, AA743956, AI282336, AA904218, AL046898, AW301818, AI469172, AI307426, AA584082, AA745410, AI048616, AA515938, AW361583, F29989, AW071063, AA581342, AI802526, AI537955, AI446518, AI358229, AI807372, AI565245, AW406755, AI365988, AA340003, AW339687, AI635272, AI274692, AA228420, AI003172, AI922002, AI523897, AL041368, N25927, AA578154, AW157608, AL138242, AI214510, AI281808, AW104748, AW080134, AI281807, AA713815, W60516, AII11177, AI469878, AI446601, AI469624, AL138265, AA639250, AI282832, AW243960, AI633479, AI858451, AW029038, AI828710, AA394271, AA482711, C75026, AA503258, AA558857, AI471534, AI683577, AW236342, AI005388, N66026, AC004383, U62317, AF078904, AC004620, Z84721, AC003015, AC005206, AC005667, AC002375, Z15025, AF129756, AL109827, AL022328, AC004478, AC005778, AC004583, AC005099, AC006208, AC002395, Z99497, Z98747, AC001082, AC006057, AC020663, AC004890, AC004033, AL132826, AF037338, AL050341, AC007731, AC005500, AC004388, AC010722, AL008629, AC003035, AC010072, AC002310, AC004472, AC002073, AC005794, AL133448, AC009044, AF124730, AC004806, AC000118, AC000003, Z84480, AC004408, U70984, AF011889, L48472, AL031655, AL035690, AP000039, AC000085, AL031584, AC009946, AF015720, AC002543, AL080241, AC003982, AL021326, AC002378, AL023879, AC005257, AP000432, AC005746, AC005037, Z98754, AF064861, Y14768, AF047825, AP000495, AL109627, AC005838, AL021878, AC002350, AC005245, AC007686, AP000505, AJ229041, Z98744, AC005356, AL109622, AC002312, AC005086, U91327, AC005211, AJ006996, AC007292, AC008984, AC005815, AC004066, AC002483, AL132712, AC005284, AC000004, Z95624, AL117354, AC005815, AC004066, AC002483, AB020869, AL132712, AC007786, AF196971, AF165176, AL121846, AL023694, Z97635, AC009510, AC005184, AC007376, AC004526, AP000656, AC002565, U89387, Z84572, AL049745, AC009069, AL034406, AC006965, AC005046, AF109907, AC002432, U07000, AC006241, AL031591, AC006207, AC007387, AC005751, AC004638, AC004149, AC007221, Z69705, Z86061, Z76735, AC004540, AL096805, AL023755, Z97876, AL022395, AL033381, AL031427, AF042090, AC000052, AC007537, AL022163, AC003050, AL080276, AC004972, AC005940, AL031680, AL133494, Z73965, AC000392, AC004596, AL031666, AC005071, AC004019, AF064864, AP000561, AC004810, AC004596, AC006556, AL109967, AP000023, AC005194, AC005303, AL117340, U75285, AC004592, AC006556, AL109967, AP000023, AC005194, AC005303, AL117340, AF128846, AF128847, AC004099, AF128848, AB026188, AL096769, AL078472, AL049873, |

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| HLYCY30 | 2963 | 650859 | 1-364 | 15-378 | AC005527, AF002991, AP000358, AC002984, AF045448, AC005159, and AF000359. |
| HLYCZ63 | 2964 | 744886 | 1-430 | 15-444 | AI760159, and AL133353. |
| HLYDB85 | 2965 | 784253 | 1-343 | 15-357 | AI792627, AI254439, AI581223, AW086361, AI349662, AI053903, AI862231, AI223748, AI792525, AW197508, AI348722, AI684349, AI053450, AI583532, AW182499, H65697, AI248494, W24698, AI140609, AI270092, AA767864, AA573242, AW264786, AA233643, AI214028, AI266177, H95865, H72049, AW079694, AI011930, AC005233, AC005972, AC002428, AL031733, AC002990, U95740, AC004662, AF196969, AC002378, AC010206, AP000356, AF117829, AP000252, AC005902, AP000212, AC006581, AC004841, Z85987, AP000031, AC005622, U91323, AC004999, Z95331, AC004534, AC005482, AP001067, AC004973, AL132708, AL021917, AC005659, AL133238, Z84469, AC007277, Z98941, AF067844, U91321, AC004087, Z98044, AL121754, AC002312, AC008928, AC006160, AC005658, AC004033, AC004025, AC004953, AL031985, AC004134, AC005211, AC004079, U89387, AF111167, AC000127, AL008732, Z98743, AC004796, AC005969, AC004144, AC005793, AC004935, AC008064, AL049709, AC004143, AC006011, AC004985, AI121577, AL049539, AC004084, AL022718, AL122020, AP000167, AC005488, AL132987, U95739, AL049843, AF001548, Z96074, AR036572, U91328, AC005088, AC004552, AC003078, AL022165, AL009181, AL133163, Z83822, AP000343, AC006430, AL031466, AL049835, AC007371, AC005105, AC006026, AI035407, AC004638, AL049872, AL034402, AC005280, AL022721, U82671, AC002522, AC000095, Z95113, Z95116, AC004992, AC006515, AL022316, Z93023, AC003010, Z84466, AC007707, AC004410, AC007057, AC006059, AC004927, AC003065, AC005033, AC007245, AI078463, AC007435, AC002492, and AL117375. |
| HLYDC02 | 2966 | 919586 | 1-730 | 15-744 | |
| HLYDC77 | 2967 | 772022 | 1-438 | 15-452 | |
| HLYDD13 | 2968 | 657010 | 1-547 | 15-561 | |
| HLYDG06 | 2969 | 935149 | 1-645 | 15-659 | AI476323. |
| HLYDG21 | 2970 | 856413 | 1-538 | 15-552 | AI306717, H81406, AL134167, AA496309, AA653823, AW408596, AA582746, AA837771, AI185394, AW237905, AI417586, AI186233, AA714011, AW084173, AI915081, AI973173, AI569700, F35684, AA368329, H40478, AA487226, AI520967, AA111870, AI678287, AA502207, AA581247, AA018231, AI680547, AI298079, F33037, AI308818, AI310992, AA434078, AI078409, T08386, AI187148, AW069227, AL135363, AI755057, AA658131, AA715962, AA297006, AA722505, AA445949, AI634187, AI697242, AA077637, AI457313, AA378489, AA297698, AI272192, AI340832, AA557911, AW440451, AA778962, AI565138, AW028170, AA715983, AI653783, AL042373, AA947369, AA937809, AA071045, S42653, AC006479, AL034419, M87912, AL049839, AC005014, AF165141, AL133246, AL022323, AC007421, AL133245, AC005846, AL031984, Z84470, AC007993, AL022328, AC004385, AC004622, AL034429, AL049795, AP000142, AP000089, AC004817, AC004694, AC007773, |

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| HLYDG27 | 2971 | 682910 | 1 - 568 | 15 - 582 | AF001549, AC009247, AC007686, AC004230, AC006014, AP000472, AC005821, AC005081, U91326, AC004831, AC006236, AC002544, AF111167, AL035495, D87675, Z95152, AC012384, AC005488, AC005043, AC005104, AC005763, AC005015, AL023876, AB001523, AC004106, M55270, AC009946, AC004820, AC005519, AC002429, AC005924, Z84469, AC007386, AL050312, AC005911, AL031428, Z94801, AC004041, AL035683, AC004223, AF196779, AL035417, AC002094, AL031276, AP001065, AP000113, AP000045, AC007563, Z95115, Z97196, AC007436, AC006468, AC007156, AC004796, U07561, AL133035, AC005871, AC003963, AL031602, AL049766, AL031278, AL035458, AC005736, AF029308, AC007792, AL008707, Z98885, AC004025, AL132712, AC005288, AC007546, AP000313, AC005409, AP000501, AL031659, AL133312, AC005746, U62317, AC004076, AF196971, U95742, U91318, Z82195, AC006088, AC006285, Z82205, AL035414, AC004841, AP000050, AC007655, AC004874, Z95114, AL022394, AL050307, AL021579, AL031775, AL022316, AP000558, AC003669, AL109963, AC004129, AC005480, AL049872, AL049745, AC005189, AP000509, AL022326, AP000117, AL008734, AC004112, AC004383, AC004819, AF135187, AL135960, AJ131016, AL049776, AC005078, AL022476, AC005829, AD000813, AC004148, AP000022, AC006582, AC006430, AC007308, AC003684, Z98750, Z82176, AC003982, AL109623, AC002077, AC005722, AC004253, AC002314, AL031393, Z97054, AL049540, AF001552, AC005551, AL096701, AC005280, AC004797, AC005328, AL109798, AL034420, AC002059, U62292, AP000163, AC005612, AC005585, Z98743, AI035587, AL117352, AF048729, AL080313, AL031680, AC002364, AL049830, AC005773, AC002492, AC007052, AC006026, AC004765, AC002477, AC007216, AC005877, Z49236, AC004655, AL080317, AC007298, AL132641, AF139813, Z98048, AP000694, AC005206, AC005294, AL009172, AC005943, AF181897, AC002470, Z93784, AC005971, AI031686, AF064857, Z98304, AC005225, AL022312, AC004560, AC000120, AL031657, AL031283, AL022165, AB000931, AC006276, AL117354, AL031595, Z84466, AC005790, AC011311, Z83846, AC004228, Z82184, AL022318, AC005667, AL031589, AP001056, AL022333, AC007774, AC005513, AC007225, and AL031390. |
| HLYDG38 | 2972 | 597131 | 1 - 397 | 15 - 411 | T83869. |
| HLYDG59 | 2973 | 871587 | 1 - 439 | 15 - 453 | AA572675, AAS79556, AI361854, T95591, T95067, and AA813887. |
| HLYDH27 | 2974 | 678266 | 1 - 703 | 15 - 717 | AA252702. |
| HLYDH32 | 2975 | 699082 | 1 - 717 | 15 - 731 | R99046. |
| HLYDH52 | 2976 | 726575 | 1 - 526 | 15 - 540 | |
| HLYDJ08 | 2977 | 959055 | 1 - 513 | 15 - 527 | AI590217, AA343092, AA317170, AW157326, AW236342, AA593060, C05755, C06327, AI937850, AAS74282, AI114846, AW419262, AW440976, AI923140, AI653905, AA330380, AW131249, AW390062, AA663306, F35659, AA947370, AA828984, AI291124, AA084070, AA244208, M86058, AI291268, AI537030, AA190911, AI312149, AL118947, AW406162, |

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| HLYDK74 | 2978 | 738346 | 1 - 555 | 15 - 569 | T10560, AA837351, AA348929, AA704391, AA640979, AW167267, Z92844, AC000353, AC005690, AL137191, AL021918, Z86062, AC005911, AC005998, AC005702, AC004672, AL033392, AC004168, AL133355, AC003966, AC002985, AC005197, AC005350, AP000352, AC005625, AC004592, AC006162, AP000462, AC005704, AL021546, AC005233, AL021453, AL035457, AL022160, AP000359, AL022394, AC007536, AC007283, AC004802, AL031589, X03273, AC005620, AL096701, Z84718, AC002072, AC006251, AF165926, AC005180, Z83840, AC005619, AC004941, AC004227, AL049875, AL049860, AF042090, AP000555, AP000042, AC004834, AC005829, AC002347, AP000431, AC009247, AC004066, Z99774, AC002526, AC004019, AC003007, AL031347, AC008115, AC006480, AI031291, AC006925, AC005208, AF015170, AL034582, AL008734, X66401, AP000513, AC002073, AP000689, AC004884, Z73900, AC005696, U97187, AC005328, AL022238, AC004972, AC005632, Z83841, AC005786, AC007688, Z83846, AC005837, AL022721, AL021937, AC007899, AC005565, and AC004525. |
| HLYDL24 | 2979 | 677041 | 1 - 488 | 15 - 502 | AW005554. |
| HLYDL60 | 2980 | 909866 | 1 - 378 | 15 - 392 | AA129914, AA128462, H94876, H72836, and AI818080. |
| HLYDL75 | 2981 | 790244 | 1 - 555 | 15 - 569 | D29642. |
| HLYDM51 | 2982 | 973377 | 1 - 503 | 15 - 517 | Z99396, AL036418, AI036725, AA631969, AW392670, AL039074, U46341, AL036924, AW372827, AL036858, AL119497, AL038509, AW384394, AL039564, AL039085, AL037094, AL039156, AL039108, AL119483, AW363220, AL039109, AL039128, AL036196, AL036190, AL119319, AL119355, AL119457, AL119443, AL037526, AL119324, AL036767, AL039659, AL037082, U46349, AL119484, AL119363, AL119391, AL037639, U46350, AL119522, AL038531, U46351, AL119341, AL119335, AL043029, AL119496, AL119396, AL039625, AL039648, AL045337, AL119444, AL119418, AL036238, AL037077, U46347, AL037085, AL042909, AL134920, AL039678, AL039629, AL134531, AL134538, AL039386, U46346, AL036733, AL042965, AL037205, AL119439, AL039423, AL036268, AL042984, AL042975, AL039150, AL038447, AL040992, AL042614, AI134528, AL042433, AL038520, AL042973, AL134533, AL037027, AL036998, AL119399, AL037615, AL038851, AI142134, U46345, AL043011, AL042551, AL119464, AL036191, AL042544, AL043019, AL043033, AL039410, AL042450, AL042542, AL037178, AL036679, AL036765, AL036719, AL043003, AL036774, AL037021, AL036836, AL036999, AL036158, AL036886, AR060234, AR066494, A81671, AR023813, AR064707, AR069079, AB026436, and AR054110. |
| HLYDM62 | 2983 | 743380 | 1 - 547 | 15 - 561 | AL022098, and AC005215. |
| HLYDO56 | 2984 | 733240 | 1 - 220 | 15 - 234 | AA026296, AA086041, AA086123, and AA026297. |
| HLYDO75 | 2985 | 767170 | 1 - 346 | 15 - 360 | T97786, AA007533, AL031432, AC004520, and AL031737. |
| HLYDS11 | 2986 | 966732 | 1 - 431 | 15 - 445 | |
| HLYDS66 | 2987 | 711565 | 1 - 508 | 15 - 522 | |
| HLYDS84 | 2988 | 687991 | 1 - 533 | 15 - 547 | AW080134, AA377730, AA358122, AI264743, AA913114, AI305766, AI193007, N20066, |

AI469968, N35896, AI075744, AI312309, AI648558, AA001418, AI888752, AW023672,
AA482711, AA384502, AA593471, AI305547, AI471543, AA344959, AA452563, AI685198,
AA569468, AA448231, AI672135, AA448375, AA977743, AA318652, AA226634, AI471481,
AI345459, AI336660, AI471534, AW302309, AI206785, AA452744, AI446464, AI133102,
AA161181, AI049707, AW276817, AA837755, AL133862, AI469624, AI565581, AW117750,
AI266576, AW167267, AI133164, AI358343, AI439360, F23279, AW243960, AA394271,
AI679706, AI313166, T15948, R77905, C75026, AI341664, AI679132, AA626678, F37169,
AI683577, AL118911, AI815000, AA084715, AW008317, AA482768, AI921188, AA434484,
AA938225, F32705, AI064864, AI038833, H64777, AA364429, AA913549, AA680211,
AA377621, F25203, AW131249, N25296, H00934, AI017415, AW272758, AA340960, AI005388,
AL135405, C19058, AA480762, AI814735, R98967, AI871722, F31204, AA328169, AI523897,
AI571512, AA558697, F36273, AI824562, AA569471, AA634227, AI493217, AA363989,
AA515435, AI583594, AA078849, AA338642, AA134335, AI282661, T16592, N70648,
AA702605, AA320830, AA016286, AL047643, AI887483, AW338869, AA126035, AA810370,
AA126051, AW272641, AI143242, C17838, AI205126, F18974, H69914, AA558060, AI355224,
AW074398, AI858451, F04987, AA077817, F37286, AA515128, AA780929, AI672857,
AC000052, AC004019, AF035397, AC004935, AC006474, AF003627, AF207550, AL021707,
AL049795, AC005915, AC007076, AC004232, AL132718, U40369, AC007666, X75335,
AC005514, AC004466, AC004066, AC004916, AC004862, AC005512, L48472, AC006126,
AC004039, AL035071, AC005341, AL109759, AC007397, AL035079, AC009542, AC004065, AC009330,
AC004134, AC004859, AP000311, AC007387, D86993, AP000049, AC007564,
AC004973, AC005076, AL023284, AC009464, U62292, AL034549, AF169121, AP000142,
AP000128, AP000206, AL109657, AL031177, AP000245, AC006450, AL109985, AC004966,
AC005667, AL023880, AL133246, AC004745, AC004050, AP000066, AC005740, AB033056,
AC009509, AC002301, AC005971, AC006035, AF042091, AP000090, AC005822, U95740,
AC006287, AL132800, AL118516, AF147277, AB020668, AL109755, U85195, AC006071,
AL049611, AL034343, AC004690, AC002375, AE000658, AC005250, AF091512, AC006324,
AP000503, AC006318, AL035659, AP000558, AC006565, AC006596, D87675, U63721,
AC005619, AC006019, AC008116, Z84572, AC005046, AL023513, AL031587, AC007543,
AP000011, AL034429, AL133500, AC004765, AL008582, AF134726, AC004638, AL021391,
AF217403, AL031429, AL109628, AC005783, AC004034, AC002429, AC004028, AL022722,
AC000379, AL096829, AC007917, AC002465, AC006946, AF006501, AC005264, AC005838,
AP000115, AL049856, AL031846, AP000557, AC004139, AC003682, AF042090, Z49154,
AC003003, AC006486, AL033525, AC009516, AC006008, Z84488, AC004531, Z98755,
AC002433, AC005069, Z80899, AL109827, AC003989, AC005385, AC000119, AL133448,
AC004773, AC002984, AC004848, AJ003147, AF064861, AL034582, AC006195, AC005821,
AC005159, AC000353, AC005274, AL078581, U14702, AC006965, AC000159, AL031123,

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|---|---|---|---|---|
| HLYDS91 | 2989 | 775483 | 1-458 | 15-472 | AL031229, U93237, AC005231, AC005180, AC007690, AL031575, AJ012197, Z68284, AC002564, AL050320, AL049831, AC005829, AL035458, AL034420, AC006026, AL096791, U14714, U14715, AC004087, AC002508, AC004895, AC005037, AL033527, AC005229, Z98304, AD000833, D83989, AL008722, AF109907, AL034370, AL031319, U73024, AL109847, AC006057, AF131217, AC004686, AL023553, U71218, AC004797, AL031311, AL050312, AC005911, AC006465, AC005412, AC007283, AC002073, Z81308, AL031432, AL049776, AC005516, AL049647, AL096701, U55182, AC004994, AL035420, AF051934, AC005800, Z97183, AP001039, AL031282, AL031012, AF077058, AC005211, AC005356, AC006048, U92032, AC010168, AB023058, AP000521, AL117355, AC005879, Z99716, AC004526, AF055066, and AL080243. |
| HLYDT03 | 2990 | 920268 | 1-557 | 15-571 | AA482994. |
| HLYDT68 | 2991 | 526245 | 1-320 | 15-334 | |
| HLYDU08 | 2992 | 959074 | 1-370 | 15-384 | |
| HLYDV62 | 2993 | 927872 | 1-583 | 15-597 | AA326846, AI074002, AI084046, AA187426, and AW453048. |
| HLYDX93 | 2994 | 669792 | 1-548 | 15-562 | |
| HLYDZ44 | 2995 | 716435 | 1-584 | 15-598 | R14337, AA485189, and AB030181. |
| HLYEB56 | 2996 | 710819 | 1-316 | 15-330 | AI983188. |
| HLYED52 | 2997 | 931992 | 1-350 | 15-364 | |
| HLYED59 | 2998 | 856383 | 1-688 | 15-702 | AI374993, N94590, W23797, AA585403, AI383156, and AC000353. |
| HLYED65 | 2999 | 747763 | 1-213 | 15-227 | H72741. |
| HLYED77 | 3000 | 615312 | 1-419 | 15-433 | |
| HLYED85 | 3001 | 784254 | 1-641 | 15-655 | AA888665. |
| HLYEE34 | 3002 | 703906 | 1-554 | 15-568 | |
| HLYEJ81 | 3003 | 488925 | 1-555 | 15-569 | |
| HLYEL47 | 3004 | 666448 | 1-563 | 15-577 | |
| HLYEN93 | 3005 | 682176 | 1-612 | 15-626 | |
| HLYEQ40 | 3006 | 710986 | 1-297 | 15-311 | |
| HLYEQ73 | 3007 | 760566 | 1-339 | 15-353 | |
| HLYER38 | 3008 | 709181 | 1-386 | 15-400 | |
| HLYET03 | 3009 | 923834 | 1-447 | 15-461 | AA164189. |
| HLYFA27 | 3010 | 682763 | 1-525 | 15-539 | AW405746, AI479114, AA845235, AI766637, and AI361762. |
| HLYFA58 | 3011 | 835409 | 1-393 | 15-407 | AA504562. |
| HLYFC15 | 3012 | 923620 | 1-858 | 15-872 | AW085626, W24802, AI754926, AA527633, R63460, AW028376, R23449, AA465198, |
| HLYFF10 | 3013 | 964109 | 1-563 | 15-577 | AA338395, AI797998, R96319, Y18000, AC004000, AC005971, AC004882, AC005529, |

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|---|---|---|---|---|---|
| | | | | | AC007051, AL078612, AC005358, U95739, AC007536, AL022721, AL031121, AL049830, AL022326, AC007919, AP000512, AL049709, AC005839, AC004009, AL033381, AC005695, AC007371, AL078476, AP000356, AC007666, AC002477, AC009516, AC003982, U10580, AC006581, AL022316, AC005037, AC005209, AC007057, AL049872, AL022165, AL008582, AC005377, AD000092, AC005225, AL049569, AL049694, AC003013, AC004804, AL035086, AP000555, AC005618, AL031255, AC004988, AL031003, AC004526, AL050321, AC009247, AC005237, Z94721, Z69375, AC000052, AC004472, AC005694, AC002310, U85195, AL050308, AL022311, AL133448, AL022327, Z97056, AC005585, Z97183, AL121580, AE000658, AC005527, AC002544, AC001643, AC005899, AC006480, Z97054, AC005632, AC007546, AL031985, AC004099, AF001550, U78027, AC004185, AL035422, AC005207, AP000692, AL022320, AC004019, AC004862, AB022785, AC005913, AC006511, AI022476, AC006930, Z85986, AC006241, AC006468, AL008725, AL021707, AC007514, AC005800, AL079295, AC005231, AC000004, AC008115, AC004967, AC004100, AL009181, AL109758, AL034420, AC005291, AP000558, AP000553, and Z99128. |
| HLYFF64 | 3014 | 746339 | 1 - 476 | 15 - 490 | AA858380, AW269071, AW271095, AW302832, AI284536, AI251563, AI252141, AI733946, AI733930, AI792695, AI792746, AI792842, AI252190, AI792856, AL080242, AC004876, AC004645, AC006111, AC000091, AC004169, AR036572, U91328, AC004771, AL031775, AB001523, Z99754, AC004652, AC006129, AC004509, AC004828, AL022320, Y07661, AD000684, and AC000026. |
| HLYFI64 | 3015 | 924558 | 1 - 529 | 15 - 543 | AA287719, AI806591, and AI418161. |
| HLYFK47 | 3016 | 953988 | 1 - 423 | 15 - 437 | AI061334, AW088202, AW162049, AW080134, AI570261, AI929531, AW104748, AA482711, AL046409, AI357551, AI963720, AA714453, AI471481, AI341664, AI962050, AI344844, AW029038, AI049634, AI350211, AA581903, AI814735, N53150, AI133636, AW168815, AI567674, AA610491, AI291268, AW193432, AI291124, AW302013, AI688846, AI890923, AI375710, AI339850, AA713815, AW265009, AW193265, AI284640, AA559290, AI561255, AI669453, AI761471, AA826303, R94721, T07451, AI801600, C05755, AA501600, AI679782, AI368745, AA594145, AA649642, AI613280, AA161095, AA722048, AI561060, AI589230, AA652057, AI625244, AI860020, AI283911, AW062724, AL120674, AW440836, AI469003, AW438643, AA531372, C06458, AA584752, AI049722, AA828704, AI251002, AI537955, AA350859, AW276827, AA513141, AA623002, AA316905, AI669443, AI357288, AI610920, AA470969, AI370878, AI431303, AA513181, AA079831, AI446601, AI374809, AI345654, AA652764, AA302963, AA507547, AW079135, AI251436, AI364809, AA143516, AA806796, AA598824, AI198376, AI635818, T28550, AA340747, AI918421, AA551503, AA491814, AI917271, F04478, AI859742, AI890348, AA084070, AA582911, AI888518, AA843450, R98967, AW008212, AI654525, AI270117, AA847499, AI744995, AW238278, AW276817, AA513293, AW273218, AI301700, R97934, AW070892, AI821271, AI619997, AA934680, AA632868, AI564185, AI799642, AI371070, AA364224, AA831375, AA348929, AI801591, |

AW021583, T55213, AW088616, AW103981, AL042420, AI919029, N27329, AW265393, AI951863, AW117750, AA634146, AW300625, AA599920, AI151261, AA720702, AI634384, U51696, AA489775, AA837084, AI298710, AA832145, AA346458, AA947811, AW169537, AI418164, AA225230, AA664015, AA494097, AA634227, AI915293, W73048, AW131213, N29948, AI537030, AI921476, AI193007, AI828738, AI262909, AA577906, AA522942, AW247819, AI827234, AI376100, AI002834, AI921649, AA583955, AL038785, N43757, AW276435, AA644551, AA613345, AA364429, T06828, AA515051, AA486414, AI583594, AI708009, AA491831, AI610159, AI754955, AA970213, AI963095, AW303876, H93144, AA603156, AA584201, F25199, AA653618, AW102955, AA598997, AI439210, AI334443, AW327868, AI133164, AA468022, AA502866, R71615, AA599026, AI053672, AI339440, AI289067, AA259245, C06327, AI821356, F01314, C05986, AA213741, AA502155, AI471543, S75201, AF015160, U57007, AF015162, U18396, AF015153, AF077058, AF015155, U12584, D83989, X75335, X53550, X54180, S75337, X54177, U18392, M87919, AF015167, U57005, U57006, AF015166, U18393, U18391, U18394, X55925, U18390, I51997, U02532, U57008, X55932, U14695, U18395, S77605, U12582, X74558, X54175, U14703, A39972, U02507, X55926, AF015154, X55930, AL132712, X62354, U18387, AF015151, X55931, X54179, X55924, AF134726, AL078581, L35531, AP000503, AC007934, X54181, X54178, AL121694, U14705, S70707, AL132800, U67801, U14694, U50871, AL035450, X53549, AC006596, AC008249, AF015157, U14701, U12580, U14719, X76629, AP001065, AC002477, AC005523, S70699, U67827, AF015171, AL049712, L47228, U14718, AF015156, AF015149, U18400, Z83840, AC005808, AF038458, U14712, AI096776, AF015147, S70689, S70692, X55922, AL133241, AF045555, AP001068, AL023575, U66059, M37551, AL133500, AF015170, U14714, AC005619, AC005006, AF015165, AC002565, AC005081, U14713, AL031295, AL021154, U12583, AF140763, Z30979, U14716, AC007051, AC007919, AC005046, AL122003, AC007242, AJ011930, U14715, U14711, Z83856, AF060568, U47924, AF015158, M87916, Z22650, AL023882, AR000118, AL021391, U02531, AL133448, AF015163, AC004492, Z69706, AC004853, AC005535, AL121653, AJ003147, S70706, Z98051, U14698, AC000052, AC005228, AC007541, AF015168, AL121603, AL117330, Z86061, X88791, AC007225, U75931, AC001234, AC006486, AC005089, AC006249, U12581, U67829, AL135744, AC004814, AP000359, AC006455, U14717, AC004019, AP000114, AC004884, Z93241, AL034423, Z74739, AL121748, AC005913, U14706, AF015150, X55928, U18398, D87675, U57009, AC005763, AC007022, AF207550, AC003045, AL049757, AC002086, U67233, U57004, U14700, U18399, Z79422, U14689, U14702, X52851, AP001067, AC004491, AL049777, AL049836, M37547, AC002465, AL031681, M87923, AP000402, AL096701, S42659, AL109758, AD000684, AC007285, AC003035, AC006476, AL031258, AC006285, AL049776, U67211, Z94044, U67831, U57231, AL021878, AC006511, AP000517, AP000513, AL121757, AC006128, AL031670, AL078604, AP000090, AC006277, AC007191, AL031230, AC005866, AC003029, AC005295, AC004796,

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| HLYFO83 | 3017 | 863918 | 1-449 | 15-463 | AL021707, AL035681, AI049552, AC006195, U67222, AC004890, AC002041, AC005541, AF064861, AC003957, AL021397, M19045, J03801, E01888, E02193, AL031286, U67229, and AL033376. |
| HLYFP23 | 3018 | 675373 | 1-515 | 15-529 | AA594591. |
| HLYFR38 | 3019 | 709184 | 1-108 | 15-122 | |
| HLYFU64 | 3020 | 936051 | 1-429 | 15-443 | AI469555, Z33443, N76673, AA069889, AA281224, Z74620, AI031602, Z70227, AP000336, AL022577, AL035653, AP000215, AC004646, AB006903, AJ239329, AL078477, AC004081, AF186194, Z95703, AC005726, AP000084, and AP000221. |
| HLYFX27 | 3021 | 682776 | 1-168 | 15-182 | AC002458, AC005412, and AC007065. |
| HLYFX40 | 3022 | 710851 | 1-490 | 15-504 | N76624, and AC005740. |
| HLYFX96 | 3023 | 916452 | 1-232 | 15-246 | AI187732, and AA706963. |
| HLYFY33 | 3024 | 719251 | 1-300 | 15-314 | AA352500, AI024945, AI493761, AA340178, AI192435, AA032024, AA452969, AA447052, AI038406, AA575836, AI143749, W38849, AA643304, AA811387, AA296364, AA829930, AI783713, AA568692, AI767267, W58767, AA443666, AI708679, AI761290, D82533, AA890233, W56507, AI312651, C05835, AI247870, AA639508, AA847787, AI338935, C05751, N80205, AA412478, AA828434, AA928571, AI741989, D83838, AI078010, AI191125, AI888718, AA814538, D83836, AI206832, AI241436, AA628649, AA676899, W52897, AI683306, H44229, AI932299, W56778, AA897470, AA452830, N93132, C06275, AA523873, R10897, AA659136, N69930, W38563, AA715017, U57692, and U57691. |
| HLYFY78 | 3025 | 660000 | 1-477 | 15-491 | |
| HLYGA32 | 3026 | 698860 | 1-543 | 15-557 | |
| HLYGA46 | 3027 | 952292 | 1-754 | 15-768 | |
| HLYGC11 | 3028 | 966480 | 1-461 | 15-475 | |
| HLYGC18 | 3029 | 665721 | 1-543 | 15-557 | |
| HLYGC63 | 3030 | 744739 | 1-526 | 15-540 | AA381269, AI859834, AA663966, AI754955, AI350211, AW193265, AI537077, AA490183, AI434695, AA515905, AA577906, AI151407, AI613280, AW276827, AA857486, AI754658, AL118991, AA483223, AI979005, AL048925, AI744995, AL041706, AA623002, AL038705, AW080811, AA594145, AA713891, AA469451, AA493708, H73230, AI860013, AI379719, T47936, AW050734, AW275719, AI433247, AL040382, H88666, AW276435, AI814735, AA503258, AW263864, AI859946, R17793, AA177061, AA652764, F36273, AA665021, AI635279, AI061313, AA226153, AA721524, AL119691, AA122223, AA493621, AA488746, N76766, AI933714, AI570943, AA846876, AA587604, AI745151, AA806796, AW103758, AI358501, AA502963, AW337454, AA613203, AI204304, AA599480, AI561060, AA767963, AA569471, AW129001, AW338086, AI623898, AA503154, AW408707, AA779783, AI471815, AI708444, AI865213, AI708009, AA598425, N53150, AI446474, AA633582, AW021583, |

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| HLYGE28 | 3031 | 686173 | 1 - 565 | 15 - 579 | AI654247, AW304805, AA765170, AI753488, AA136122, AW020992, AI755214, AI754567, AI623899, AI133164, AI598003, AI367497, AI610607, AA789192, AA535661, AC003007, AC005632, AC002310, AC007191, AC005562, AL049557, U85195, AL022316, AC002470, AE000658, AC002316, AC004987, AC006285, AC004832, Z82214, AC007298, AC005839, AL022721, AC008115, AC000353, AC002400, U95742, AC005081, AL023803, AC005702, AC004890, AD000092, AC007216, Z93241, AC002429, AL049829, AC008372, AC005808, U47924, Z98051, AC005529, AC004859, AC006312, AC005940, AC005666, Z85986, AP000359, AL008718, AL050402, AC007510, AL096829, AC004933, AL023581, AC004760, AL049758, AC005046, AF001550, AL035450, AC004647, AL031311, AC004638, AF196779, AC003051, AL133500, AL079340, AL049776, AP000123, AP000055, AP000170, AC003071, Z83822, AL049709, AL022476, AL121748, AC005763, AL031284, AC003098, DR76675, AC006581, AC006111, AC005527, AC006040, AL031587, AC004019, AC003664, Z69917, AL008730, AL049745, AC002301, AC006057, AL031432, AC002312, AL034549, AL023575, AC005229, AL080250, U80017, AL078463, AC004477, AL049860, AC016830, AC004041, AL133485, AC007666, AC009516, AL031650, AL022165, AL024498, AC007227, AC006011, AF141309, AL034384, AC007731, AP000459, AC004963, Z97054, AP000552, AC004692, AC003982, AB000882, AF207550, AC005500, AC007051, AJ003147, AC003147, AC005209, AC005740, AC007285, AF111168, Z83844, AC002430, AL049872, AC004685, AB023049, AC004584, AC020663, AL121934, AC007030, AC004953, AL135745, AC004525, AC005291, AC007151, AC005944, AC005844, AC002395, AC007384, AL135745, AC004525, AC005821, AC002303, AL080243, AP000557, AP011051, AC007076, AL035608, AC000039, AC002041, AC005694, AC012085, AC004167, AC004884, AC005412, AL031719, AC003684, AC006030, AC000134, Z83845, AL035659, AC005755, AC007919, AL022313, AC004975, AC000052, AC006120, AC006128, AL034351, AL133245, AC007676, AL031286, AL031588, AL021154, AC006486, AC002549, AC004596, AC005015, U07562, AC004257, AL049779, AC007707, AP000513, AL031428, AC005089, AC007363, AL109865, AL139054, AL035451, AC004999, AP000252, AF029308, AC007225, AC016025, U66059, AC002350, AC004386, Z94056, AC006928, AL096710, AL035690, AL031662, Z75741, AC007877, AC005969, AL117330, AL035460, AL035420, AC006288, AC006006, AC007774, AC005399, AC006552, AL109985, AC008101, AC010168, AC007564, AL022328, AC006211, AF067844, AC005393, AC002425, AC007226, AF053356, AC004496, AC006153, AL035681, AC006538, AC006050, AL136297, AC006130, AC004783, AC004526, AL009179, AC004010, AC005548, AC004381, AP000134, and AP000212. |
| HLYGH53 | 3032 | 871636 | 1 - 870 | 15 - 884 | AA884313, AA825598, and U95737. |
| HLYGI23 | 3033 | 656698 | 1 - 245 | 15 - 259 | AJ032724, AW008354, and AC004953. |
| HLYGK24 | 3034 | 676907 | 1 - 267 | 15 - 281 | AA829941, AA906288, and AI914939. |

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| HLYGK77 | 3035 | 732362 | 1 - 433 | 15 - 447 | AL035410. |
| HLYGK82 | 3036 | 698553 | 1 - 360 | 15 - 374 | . |
| HLYGK96 | 3037 | 967628 | 1 - 467 | 15 - 481 | AA513861. |
| HLYGM41 | 3038 | 712099 | 1 - 387 | 15 - 401 | AA173740. |
| HLYGM53 | 3039 | 690748 | 1 - 629 | 15 - 643 | H56560, R06615, T85748, N92020, AA707219, H90265, and N63876. |
| HLYGP15 | 3040 | 920077 | 1 - 539 | 15 - 553 | |
| HLYGP26 | 3041 | 790301 | 1 - 415 | 15 - 429 | |
| HLYGP46 | 3042 | 832311 | 1 - 982 | 15 - 996 | AI004177, AW051735, AI923749, AI635200, AI201473, AI766831, AI352428, AA868576, AI380688, AI936241, AW393044, AW374354, AI318183, AW393061, AW374438, AI005539, AW364275, AA300050, AA909208, AI273127, AA814294, AA705616, AI698332, AI814050, AI273128, T27697, AA878157, N26436, AI224032, AI540961, AA291160, N35079, AW402662, C16472, C16435, H99331, AW408278, and D25278. |
| HLYGR39 | 3043 | 744849 | 1 - 341 | 15 - 355 | AC004777. |
| HLYGV02 | 3044 | 856376 | 1 - 389 | 15 - 403 | |
| HLYGV07 | 3045 | 879387 | 1 - 489 | 15 - 503 | |
| HLYGV66 | 3046 | 697627 | 1 - 600 | 15 - 614 | T87263, H94155, and AA055829. |
| HLYHB85 | 3047 | 773990 | 1 - 548 | 15 - 562 | |
| HLYHG09 | 3048 | 590369 | 1 - 597 | 15 - 611 | AA640056, H69347, H69346, AL021155, AL031588, and AL034418. |
| HLYHG18 | 3049 | 665713 | 1 - 439 | 15 - 453 | AA075210. |
| HLYHG45 | 3050 | 711741 | 1 - 620 | 15 - 634 | AA300319. |
| HLYHI75 | 3051 | 767066 | 1 - 550 | 15 - 564 | AW198107, AA917906, Z36759, H87252, AI521360, AI247128, AI207422, AA843450, AA601230, H47835, AL031657, AC000379, AC005971, AL022165, AC005037, AL049776, AL021391, AC007938, AC004602, Z98036, AJ236694, AL034549, AL022238, AC006441, AD001527, AF047825, AF196969, AL022328, AL049843, AC002312, AL031587, AC003695, AC020663, AC006237, AP000563, AC005482, Z95115, AC005531, AC004882, AL080243, AP000211, AP000133, AP000509, AL021878, AC004797, AL049869, AL049594, Z83840, AL121653, AC006117, AC002091, Z93244, AL035086, AC005332, AP000126, AP000204, AL079342, AL109839, AC005300, AC005206, AC005839, AC003663, AL109963, AP000553, AC008372, AF134726, AC005031, AC006312, D84394, AC005519, AC005667, AC004087, AC007050, AC005899, AC004998, AC002477, AC003035, AC005089, AL031295, AC005183, AL109984, AC002418, AL022327, AC003035, AC006515, AL096712, AC004099, AL049694, AL109758, AC004491, AC005015, AC004815, AC005017, AC006501, AC004228, AC005562, AC002470, AL096761, AC007240, AP000704, AL031407, AL008723, AC009516, AL021579, L31848, Z84476, AC012384, AL117330, AL031407, AL008723, AC009516, AL031985, AC005018, AL049552, AF196971, AL133163, AC005069, AC005529, AC004525, AL022311, and AC007114. |

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| HLYHK02 | 3052 | 919199 | 1 - 525 | 15 - 539 | AC004472. |
| HLYHL74 | 3053 | 765292 | 1 - 534 | 15 - 548 | AA559182, AA573068, AA491823, AC005386, AP000692, AC004662, AC007386, AC007738, AL121653, AC002350, AC002404, AL022320, L05367, AL078581, AC004921, and AL096701. |
| HLYHM86 | 3054 | 784724 | 1 - 461 | 15 - 475 | AA569573, and AA908998. |
| HLYHN47 | 3055 | 720019 | 1 - 570 | 15 - 584 | H15547, F02465, and N73834. |
| HLYHN67 | 3056 | 920551 | 1 - 708 | 15 - 722 | AW387103, R67677, AW404276, H03065, AW403805, AW387108, AI360165, AI891114, AI346739, AA115361, AW410383, AA476376, AI493775, AI373735, AW005762, AI683639, AA814726, AI885010, AI767165, N77394, N52435, AA548360, AA804529, AI335842, Z43872, H12922, F11250, and AF176915. |
| HLYHQ49 | 3057 | 659883 | 1 - 262 | 15 - 276 | AA380617, and AC005041. |
| HLYHQ79 | 3058 | 751428 | 1 - 548 | 15 - 562 | H57483, AI888261, R92056, and AA594742. |
| HMAAA35 | 3059 | 773472 | 1 - 507 | 15 - 521 | T73196, AC007182, and Z64784. |
| HMAAE04 | 3060 | 385644 | 1 - 317 | 15 - 331 | |
| HMAAE83 | 3061 | 745077 | 1 - 420 | 15 - 434 | AW445199, AI291885, AI796788, AI291659, AI681688, AI586930, AI863432, and AI371323. |
| HMAAF10 | 3062 | 968199 | 1 - 413 | 15 - 427 | D57175. |
| HMABJ56 | 3063 | 907640 | 1 - 401 | 15 - 415 | AI523278. |
| HMABN34 | 3064 | 706264 | 1 - 459 | 15 - 473 | AI865938, AA608751, AA639946, AI865807, AW068316, AA528500, AA365586, AA603530, AI814739, AI874201, AB023048, I34294, AC004659, AC005696, AL080243, AC004796, AC006153, U95742, Z94721, AC004821, Z98745, AC007216, AC005678, AF196779, Z98742, L78810, AC004851, AC007055, AL133448, Z85987, AC005081, AP000563, AC002128, AC004812, AC002470, AP000133, AC004491, AC006130, AL021154, AP000558, Z82195, AL109627, AL022323, AP000211, AL031311, AP000510, AC004150, AC005200, AL031662, AL034420, AC004859, AC006111, U91326, AL035587, AC005914, AF060568, AC000159, AL022322, AP000300, AC003010, AP000555, AC006571, AC004522, AC004645, AC004019, D87011, Z93930, AC005519, AC009516, M59250, AC005015, L44140, AL136295, AC002544, AC005412, AC005067, Y18000, AC005747, AC004834, AL021808, AL031737, Y14320, Z93241, AL121769, U29895, AC005358, AC003070, AC004834, AL031808, AL049643, AP000030, and AC005940. |
| HMABQ71 | 3065 | 729831 | 1 - 500 | 15 - 514 | AW298595, AA465415, AA769410, AA465345, AA468904, and AA971248. |
| HMACS56 | 3066 | 733395 | 1 - 435 | 15 - 449 | |
| HMADC02 | 3067 | 920088 | 1 - 205 | 15 - 219 | |
| HMADL77 | 3068 | 708074 | 1 - 143 | 15 - 157 | |
| HMADM33 | 3069 | 970491 | 1 - 431 | 15 - 445 | |
| HMADX31 | 3070 | 697994 | 1 - 248 | 15 - 262 | AW452893, Z25062, AI215990, AI699527, AI147565, AI004649, AI291404, AI669727, AI820914, AA479756, AW005622, AA831051, F00452, AA825896, AA885489, AA725719, AA588432, AW071714, AA583305, AW451815, and AA969033. |

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| HMADZ55 | 3071 | 939916 | 1 - 732 | 15 - 746 | AW177706. |
| HMAEJ62 | 3072 | 744337 | 1 - 347 | 15 - 361 | |
| HMAFD57 | 3073 | 734688 | 1 - 322 | 15 - 336 | |
| HMAFF77 | 3074 | 856267 | 1 - 368 | 15 - 382 | AA362198, W21176, H87432, and AA302842. |
| HMAFM35 | 3075 | 925049 | 1 - 427 | 15 - 441 | |
| HMAFM55 | 3076 | 733286 | 1 - 417 | 15 - 431 | |
| HMAFP30 | 3077 | 692598 | 1 - 500 | 15 - 514 | AW392670, Z99396, AW384394, AW372827, AW363220, AL119497, AL119341, AL119443, AL119496, AL119319, AL119355, AL119457, AL119324, U46341, AL119483, AL119484, AL119363, AL119391, U46351, AL119335, AL119522, AL119396, AL119418, U46350, U46349, AL134902, AL042975, U46347, AL119444, U46346, AL042551, AL037205, AL134536, AL042450, AL042614, AL119439, AL042433, AL042984, AL119399, AL042965, AL119401, AL134920, U46345, AL134527, AL134525, AL134538, AI142131, AL043019, AL042970, AL119488, AL042896, AL042544, AL043029, AL042542, AL043003, AL119464, AL037027, AL036765, AC005065, A81671, AR060234, AR066494, AR054110, AB026436, and AR069079. |
| HMAFY42 | 3078 | 778521 | 1 - 409 | 15 - 423 | AW402092, AA312190, AI907395, AA356734, AW403328, AA357475, AA352723, AW401989, AA352880, AI651812, AA347435, AA347937, AA360333, AA347660, AA347524, AW250682, T80305, N34180, AA191246, AF112209, AF052504, U72519, U70211, and AF131766. |
| HMAFZ61 | 3079 | 741754 | 1 - 90 | 15 - 104 | |
| HMAGK69 | 3080 | 723186 | 1 - 535 | 15 - 549 | |
| HMAHP62 | 3081 | 736039 | 1 - 321 | 15 - 335 | |
| HMAHR04 | 3082 | 694042 | 1 - 98 | 15 - 112 | |
| HMAHS30 | 3083 | 823422 | 1 - 147 | 15 - 161 | AL035413. |
| HMAHX69 | 3084 | 735355 | 1 - 469 | 15 - 483 | |
| HMAIC22 | 3085 | 947905 | 1 - 423 | 15 - 437 | |
| HMAIP90 | 3086 | 681320 | 1 - 308 | 15 - 322 | |
| HMAIU62 | 3087 | 856278 | 1 - 539 | 15 - 553 | |
| HMAJY01 | 3088 | 916259 | 1 - 459 | 15 - 473 | AA779075, AL037910, AA837351, AL134330, AA993198, AI084012, AW403720, AA300052, AA173970, AL045709, AA393847, AA779783, AA811580, R59660, AA262752, AA665257, AI570943, AI978712, AI377413, AI814721, AA059415, AW270619, AA565826, AA664235, AI903081, AA159516, AA252641, AC006965, AC003687, AC005741, AL049745, AC005738, AFI18808, AC004534, AC004841, AF121782, AL035684, AL034402, AFI24523, AL031285, AL080317, AL132987, AP000961, AC002351, AL050338, AL133246, AL008709, AE000660, AL035089, AL020990, AL049838, AC002385, AC005610, Z99495, and AC006368. |
| HMAKA11 | 3089 | 801917 | 1 - 1707 | 15 - 1721 | |
| HMAKF82 | 3090 | 856311 | 1 - 603 | 15 - 617 | |
| HMALL66 | 3091 | 956195 | 1 - 496 | 15 - 510 | AI826091, AA580077, AI359456, AI362274, AI361512, AI361076, AA861038, AA961076, AW008827, |

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| HMAMA69 | 3092 | 975074 | 1 - 431 | 15 - 445 | AI658621, AI368484, and AC000392. |
| HMAME11 | 3093 | 955999 | 1 - 2660 | 15 - 2674 | AL049648. AA780265, AI921096, AI766065, W63619, AA399960, AI912594, AW204723, AW300114, AW182579, AI681695, AI634542, AW300127, AW134790, AI672402, AI632484, AI991208, AI921108, AW273778, AI672557, AA829864, AI887668, AA237046, AI498167, AW274451, AI703437, AI870323, AW173366, AI368759, AA455660, AI333733, AA143030, H18069, W73117, AI870510, AW006266, AA972594, AI659606, AI862877, AA167089, AA029847, AA548971, AA602625, W44772, N24939, AA845904, AA669693, AI268864, AA281067, AI130979, AW003963, AA446051, AW189836, AI971599, AI273393, AI392880, AW197453, AI278947, AI351669, N62971, AI308071, AI936847, H98724, AA836448, AI440191, AI989522, AA011285, AI589281, AA293010, AAR27358, AI339270, AA459005, AA455715, AI860721, AI302146, AA524204, AA505574, AI364520, AI090733, N66064, H97021, AA135737, AA432293, H72683, N24292, AW190461, AI027367, W93402, AI912153, AA962416, AA719182, AI367284, AW205556, AA911230, AA029982, AA399292, R11703, D25619, H97049, AI699130, N23812, AA952896, N36243, AI168162, AA723573, AA476536, AI214579, AA594325, AI694799, AA975509, AA150983, AI122611, N35346, R61136, AA459224, AA024419, AA044981, AA927127, AA976353, AI631939, AW023248, AA806738, H25442, AI572175, AA858127, AA278458, AA034991, W37092, AI370017, AA024420, D82669, H25487, T33969, T83721, N22469, AI473134, AW150562, T16805, AI383106, R12119, T36116, AI188357, AA988155, H17376, T39763, AI823318, T39771, T39737, AI341595, AA906253, AA715091, N99439, AI611116, N44714, AA281192, T39788, T39778, AA203543, N72004, AA383416, F04896, H10770, Z40617, AA857399, T98192, T98193, AI918795, AW274013, AA907736, AA906256, Z43451, T39764, T17433, AW089288, AI696191, AI692608, AI638777, R47794, AA459004, AA700917, AW378486, AI873655, T39745, AW057906, AA301109, AI368524, AI873204, R40787, W93614, W61128, AI471097, AI935327, AA927938, AA904804, AA010846, N95657, AA034960, H10769, AA091950, N79875, N56479, AW138315, R50427, AA236848, AA724749, AA383283, AI001837, AA365102, AA093695, AI765014, AA471159, AI686101, H72682, AW362319, F07569, and AI091461. |
| HMCAF27 | 3094 | 959557 | 1 - 553 | 15 - 567 | AI817881, AW271350, AI452395, AI698804, and AL022316. |
| HMCAJ60 | 3095 | 586435 | 1 - 288 | 15 - 302 | AA179308, AA122166, AA166791, Z25347, N41968, AI087936, AA055715, AA037848, AW351931, AA748014, AA740754, AI193280, AA452481, AA610857, and D79986. |
| HMCAO01 | 3096 | 916843 | 1 - 606 | 15 - 620 | |
| HMCAU25 | 3097 | 856241 | 1 - 255 | 15 - 269 | |
| HMCAW49 | 3098 | 974119 | 1 - 555 | 15 - 569 | |
| HMCAZ67 | 3099 | 751804 | 1 - 574 | 15 - 588 | R95734, AA702224, AA557260, AW304938, AI761850, and AJ223183. |
| HMCBI05 | 3100 | 932146 | 1 - 348 | 15 - 362 | |
| HMCCA45 | 3101 | 722027 | 1 - 430 | 15 - 444 | |

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| HMCCB30 | 3102 | 1 - 381 | 692830 | 15 - 395 | AC004682. |
| HMCCB62 | 3103 | 1 - 229 | 747136 | 15 - 243 | AW135935, AW138952, AW137754, AW135962, AW138823, AW138870, AW136428, AW207624, AW139869, AW341135, AI458161, AW341795, AI936474, AI702804, AI298857, AI205685, AI692679, AW340949, AI860249, AI223102, AW341157, AI268060, AI680872, AI692602, AI458917, AI819255, AA724456, AI797139, AI378332, AI457094, AI168190, AI797065, AI689805, AW070376, AW419338, AW117584, AI458888, AA932423, AI150020, |
| HMCCB78 | 3104 | 1 - 290 | 773660 | 15 - 304 | AA062985, and AC005829. |
| HMCDB42 | 3105 | 1 - 474 | 713051 | 15 - 488 | AW298470, AW082724, AI304868, AI348442, N20641, AI018013, AA776579, AW293387, AI124624, AW298354, AA804512, AA737473, AI280305, AA923469, R50142, AA837153, AA921954, AA827804, and AA748461. |
| HMCDM32 | 3106 | 1 - 432 | 699249 | 15 - 446 | AA488432, R77507, AA001526, AA102031, AA443065, W33067, F18394, AW243706, T51965, AA461430, AA774222, AI049662, AA629597, AA724230, R44592, AI363798, AI561335, AA630030, AA659856, AI670124, AA330772, N64437, R79496, AL119025, AA364193, AA642265, T65735, AA195798, AA196052, R78564, AA481363, AA345330, AW270284, AA481375, AA669387, T29360, AA365248, AA825793, M78150, AA620390, T60791, AI874201, AA484148, AI758582, AA747472, AA747620, H95528, AI284583, AA528516, AI349874, AA457771, H39713, H44095, AW341892, AI446464, AI469687, AA312878, AA347820, R81240, H14935, AA745560, AA935789, T71030, AA984387, AA244415, AA828696, AA745431, AA679493, AI468134, AA226364, AA834820, H85382, R13151, AI801600, AI174535, AI345522, AA658235, C18648, AA573695, AI061089, M77950, AA720583, AA551575, H04821, AI801591, AA135119, AI344844, AI619997, AA641103, AW029526, H14931, T71998, AA669522, AI298977, AI225141, AA513939, AA630834, R54885, AW265009, AI439360, N55273, AI499134, AA829405, T15977, R66997, AI921188, AA593533, AA788883, W45336, AI499503, AA192695, H26689, AA115729, AA177063, AA758934, AI473684, AW117750, AI379719, AI565581, AA242863, AW327868, AA533038, AI613261, AL118911, AA533450, AI871992, T91024, AI792108, H95267, AL048626, AA533092, AI310138, AA196020, AI164251, AI340453, W37910, AI064864, AL041382, AA192337, AI557323, AA034177, N87410, AA525898, H73070, AC003663, AC007358, AR051521, AC005511, AC008079, Z85986, AL133485, AC006210, AC004226, AC004859, AC007919, AC004194, AL033531, AC005255, AL109984, AP000338, AP000216, AC008101, AL031774, U02050, AC004638, Z85987, U90297, AC010349, AC016830, AF128525, AC004383, AF124523, AF147341, D31757, AC005250, Z93930, AF064863, AF026807, L16016, U72790, Z84466, AR060394, X64467, Z99754, D16583, AC005759, AP001056, AC005564, AC005542, AP000698, AC007766, AL021977, AL008716, AL080245, AL022311, AC005591, AC007401, AL117325, AL049758, AC004776, AC004001, AL035073, AL031905, AP000692, AC004891, Z83841, AC004941, AC005208, AC007243, AC004468, AC002472, AB020868, AC005548, AC007664, AL031651, AC005544, AC008012, AL021395, |

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| | | | | | AL121748, AP000501, AF196779, AC005209, AC004782, AC008055, AC006530, U95740, AC005771, AC007151, AL049872, AL022152, AC009275, AC003071, AP000959, AC006277, AC005529, AC006016, L81692, AC004000, Z68277, Z82171, Z75896, AC005620, AC005614, Z82217, AC005755, AC005994, AP000152, AP000010, AL035659, AC005091, AL050331, AC006014, AC002402, AL035667, AL022324, Z97987, AC002091, AC005488, AC006946, AC004036, AP001137, AC005660, AL078580, AC010072, AL080242, AL078581, AL136520, AL031257, AP000359, AJ006995, U02054, AC001555, AF032985, Z49235, AC005327, AL021397, U62293, U63721, AC003026, Z83847, Z98750, AC004752, AC005210, AC005057, AC004933, Z83846, AC005341, AI049691, AC002038, AC000379, AC005007, AC003962, Z31005, AC006121, AC006388, Z99128, AC002461, AF050154, AC007540, AL008631, X55922, AC002485, AC007842, AC008372, AC004652, AC004543, Z99496, AC005154, AC004458, D14813, AL135744, U34879, AL034349, AL035665, Z99495, AC005829, AC005019, and AC002106. |
| HMCDN22 | 3107 | 895981 | 1 - 615 | 15 - 629 | AW264938, AA039677, AI554747, AI696900, AI042720, AL045791, AL040219, AA614566, AA459899, AI697044, AA077186, AI201384, AA040234, AA622885, T62577, AI076623, AI247893, AA325208, AA074393, AI858610, AA280172, R10147, AA308856, AI267803, AI870586, AL046240, AA757892, AL048960, AA249116, AI267805, AA906248, AA077724, AW372467, AA999887, H19634, AI203658, AA910849, AA906244, H19636, AI129946, AI949914, AI289213, AI656920, AA996066, AW197305, AA078294, AA345106, AL042573, R10553, N22657, AA127979, AC006014, AC005488, AJ007798, AL137492, AC005071, AF030453, and AC005088. |
| HMCDT92 | 3108 | 974588 | 1 - 483 | 15 - 497 | |
| HMCFA71 | 3109 | 760034 | 1 - 99 | 15 - 113 | AF092170, AF094827, AF053316, and AF153472. |
| HMCFB22 | 3110 | 963794 | 1 - 508 | 15 - 522 | AC005799. |
| HMCFR51 | 3111 | 725425 | 1 - 414 | 15 - 428 | AL117694. |
| HMCFW22 | 3112 | 674074 | 1 - 736 | 15 - 750 | AI916866. |
| HMCGG31 | 3113 | 697533 | 1 - 373 | 15 - 387 | AI093606, R75654, AI223427, AI587676, AL133404, U82523, AC004056, AC006582, U35039, AP000029, AF069679, AF100956, AF055453, U16790, AF140707, AC007585, and AF140708. |
| HMCGJ36 | 3114 | 708050 | 1 - 149 | 15 - 163 | AA522990, and AA523266. |
| HMCGN29 | 3115 | 690288 | 1 - 347 | 15 - 361 | AL078593. |
| HMCGW54 | 3116 | 846134 | 1 - 339 | 15 - 353 | R61207, AA595242, AA885902, AA664829, AI128992, AA191001, AA236451, AA568605, N20562, N21453, AA205313, AW299827, AI421414, AI092515, AI359411, AI678568, AA412120, AI017854, AI080378, AI829849, AI457327, AI278017, AI720720, AW079295, AA604404, AI161131, AW025239, AW004793, N38928, AI202803, AI735406, AI199103, AI937534, R26385, AA931424, R65602, AI341364, N52379, AI206697, AA393099, H60854, H69040, H75378, AI254208, AI033280, AI928767, AA917535, H48236, H92760, H75372, H53825, AI978889, and H48327. |

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| HMCGY77 | 3117 | 753133 | 1 - 389 | 15 - 403 | |
| HMCHA04 | 3118 | 927287 | 1 - 451 | 15 - 465 | AW352117, AW177440, AW375405, AW377671, AW178893, AW360811, AI535959, AW366296, AW360844, T03269, AW360817, AW179332, C14389, AW179328, T48593, AW375406, D80439, AW378534, D58283, AW377672, AW179023, AW178905, D59859, D80022, C14331, D80166, AW177731, D80212, D80195, D59927, D59467, D51423, D59619, D80247, AW378528, D80210, AW178906, D51799, D80391, D80164, D59275, AW178762, D80240, D80253, D80045, D80038, AW179019, D80043, D59787, D80227, D59502, AA305409, AW378532, AW360834, AW177501, AW177511, AW377676, D81030, D81026, D80269, C14014, D80268, D80366, D80196, D80188, D51022, D80248, D50979, D80219, AW378533, D80522, D50995, D80302, C06015, D51200, AA305578, AW179020, C15076, D59610, D51060, AW352171, C14429, D57483, D51103, AW352170, D59889, D80133, AW178907, AW177733, AW178908, AW179024, D80024, AA514186, AA514188, D80157, AW178911, D80378, D45260, AW179329, AW177505, AW177456, AW178775, AW367950, D80241, AW178909, AW176467, AW179004, D80251, AW178980, AW178986, AW178914, AW178774, AW178754, AW179018, AW352158, D80390, D80314, AA285331, C03092, C75259, AW378539, AW378543, AW378525, AW378540, AW352163, C05695, AI525923, AW178781, F13647, AW360855, AI525913, AI525917, AA514184, AI557774, AI525925, AF123263, I50126, I50132, I50128, I50133, AR066488, AR016514, Y17187, Y17188, A94995, Y12724, AR066487, AR060138, A84916, A45456, A67220, D50010, D89785, A62300, A62298, Y09669, AB028859, A82595, A78862, D34614, D26022, AR060385, A30438, AJ132110, AR018138, A26615, AR052274, A43192, AR008278, X67155, A43190, AR038669, AF058696, A25909, A63261, D88547, X82626, AR008443, AB002449, D13509, A70867, AR062872, AB019242, AR016691, AR016690, U46128, AR025207, A64136, A68321, AR060133, AR008408, AR032065, and X68127. |
| HMCHE16 | 3119 | 856332 | 1 - 403 | 15 - 417 | AA380953, and AA917719. |
| HMCHG76 | 3120 | 769734 | 1 - 498 | 15 - 512 | AI628096. |
| HMCHK22 | 3121 | 974585 | 1 - 627 | 15 - 641 | |
| HMCIA10 | 3122 | 963791 | 1 - 327 | 15 - 341 | |
| HMCIA94 | 3123 | 853999 | 1 - 325 | 15 - 339 | |
| HMCIK90 | 3124 | 788596 | 1 - 389 | 15 - 403 | AI381684. |
| HMCIS32 | 3125 | 698541 | 1 - 373 | 15 - 387 | |
| HMCKC30 | 3126 | 671952 | 1 - 354 | 15 - 368 | |
| HMMAB49 | 3127 | 462502 | 1 - 356 | 15 - 370 | D29160. |
| HMMAC10 | 3128 | 964846 | 1 - 299 | 15 - 313 | AA468110. |
| HMMAC19 | 3129 | 953580 | 1 - 342 | 15 - 356 | AA689256. |
| HMMAC79 | 3130 | 577951 | 1 - 443 | 15 - 457 | |

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| HMMAD06 | 3131 | 935734 | 1 - 388 | 15 - 402 | AL031053. |
| HMMAD35 | 3132 | 964749 | 1 - 817 | 15 - 831 | AI281624, AW450798, and AC002302. |
| HMMAD40 | 3133 | 666181 | 1 - 431 | 15 - 445 | AC007165. |
| HMMAD58 | 3134 | 891329 | 1 - 668 | 15 - 682 | AP000556, AP000552, AP000557, AP000128, AP000206, and AP000245. |
| HMMAE12 | 3135 | 970892 | 1 - 534 | 15 - 548 | |
| HMMAE43 | 3136 | 715381 | 1 - 344 | 15 - 358 | |
| HMMAF44 | 3137 | 855916 | 1 - 354 | 15 - 368 | N54179, AI270768, T48871, T62975, AA812433, AI952786, AA652057, F12535, AA448858, AA077817, AA975249, AA125788, AA837351, AA581907, AA720702, AA025083, AI459486, F37052, W38980, AA569187, AA748121, AA649642, AI446464, AI266133, N40368, AA507169, AL045077, AF150152, H74314, AA604613, AW408161, AI460390, AA457280, R32200, AI830390, AW028353, T48872, T40077, AA613329, AA491762, AI016704, AA362700, R26134, AA593243, AI064864, AA452567, AI613459, AW406162, AL036523, N79258, AI439360, AI719434, AA443426, AA224966, AA377767, N23649, AL041706, AA338431, AA878495, AA482681, AC005839, Z84480, AC006026, Z49237, AL021391, AC005972, U07000, AC005207, AL031602, Z83840, AP000269, AP000103, AC006040, AC004134, AL021707, AP000688, AF130343, AC005410, AL109865, AJ003147, AC005387, AC004694, AC006153, AC005602, AF108083, AC005486, AF196969, AF207550, AC005632, AP000033, AL035587, AL035071, AF038406, AD000092, AC006211, AC005542, AC005175, AC004035, AC005362, AP000512, AC003684, AI049589, AC005599, U07563, AC006222, AL121782, AL031589, AC005899, AL133353, AC004922, AC006965, AC004076, AC002543, AL031659, AL078581, AC005184, AJ010770, AL035072, AC004890, AC006251, AC005071, AC007637, AC005841, AL022476, AL035681, AC004983, AC000066, AC002551, AC005887, AL034379, AF053356, AC004595, AP000547, AL031281, AC005793, AC005187, AC004687, AL080243, AC004815, AC005037, AC002504, AC005519, AF131211, AL121825, AC005180, AC006985, AC004263, AC005193, L78810, AC003007, AC000025, AC005225, AC004819, AC003098, AC020663, AC016025, U27337, AL031289, AC005254, AC000025, AC005225, AC004819, AL049653, AP000313, AP000193, AP000050, AC002039, U95742, AP000117, AC007216, AF001549, AC005046, AL049872, AL035658, AC005527, AC005488, AC004638, D88268, U27335, AC006270, U27333, AC005157, AC004596, AC005409, AC007919, AC004549, AL132777, U91326, AC002544, AL031668, AC006064, AC002984, AC016027, AC004854, AC004262, Z95329, AC000070, AF045555, AC009247, AC002477, AC006046, AL121658, AC006385, AC005529, AC004230, Z85987, Z98950, AC004583, AC002404, Z99943, AL008730, AC006958, AB023052, AL031432, AC007226, AC005484, AL022311, AC004966, AC008015, Z98753, AC004848, AC005369, 299716, AC009178, AC007685, AC005233, AC007731, AP000556, AC004929, AC005261, AC005500, AP000552, Z83846, AP001053, D87675, AL031120, U85195, AC004017, AC006039, AF190465, AC004236, AP000506, AC006511, AC006509, AC009275, AL049757, AC007536, Z73979, AF015416, AC007151, AC003072, AC007993, AD001527, Z86090, AP000504, Z69705, |

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| | | | | | AC005746, AL008719, AI031003, AC004973, AC005295, AC004241, AL049761, AJ246003, AC005914, Z69376, AC005480, AL031587, AC004491, AC005944, AC007193, AE000658, AC005324, AB000882, AI117257, AC004754, AC002299, AC004913, AC005231, AC004067, AC002996, AC005598, U96629, AC004486, AC004084, AC005690, AC005932, AC005332, AC007225, Z84469, Z93020, Z92542, AF129756, and AP000513. |
| HMMAF70 | 3138 | 577918 | 1 - 695 | 15 - 709 | W05478, R27065, R23185, AA448346, AA744630, N71117, AA662694, AI610124, AL041926, X93207, and X93208. |
| HMMAF73 | 3139 | 506275 | 1 - 382 | 15 - 396 | H72232, R47235, AC007993, Z98941, AI022336, and L44140. |
| HMMAH25 | 3140 | 677861 | 1 - 296 | 15 - 310 | U61225, U61243, U60971, U61239, AC004883, U57834, and AF184614. |
| HMMAH45 | 3141 | 674953 | 1 - 70 | 15 - 84 | |
| HMMAI03 | 3142 | 860715 | 1 - 299 | 15 - 313 | |
| HMMAI56 | 3143 | 734563 | 1 - 306 | 15 - 320 | |
| HMMAI61 | 3144 | 718876 | 1 - 465 | 15 - 479 | AI355246, AW340905, AI249688, N57681, AA577824, AA904211, AI049630, AI038304, AW265279, AI366180, AI609972, R93919, AI762528, AI280266, AW265276, AI962030, AI754567, H29914, AI569100, AW192599, F35684, AW105463, AI755214, AW268090, AI955360, AI889579, AA584594, AA342238, AI306717, AI445373, AI653776, AI271762, AI268019, AI277783, AW022796, AI080307, AI824541, AI050076, AW082104, AA666215, AI754105, AW131356, AA736488, AW084173, AI283938, AL120282, AI133514, AA302982, AA558404, T03928, AA018923, AI923052, AA878492, AW301483, AI049845, R67701, AA456149, AA604831, AA297776, T40629, AW237905, AA302812, AA363027, AI885465, AI281818, AI720403, AW089625, AA487209, AA714190, AI634323, AA206707, AA610255, AW051819, AI049676, AA910941, AW337526, AW166641, AA847704, AI679045, AI250552, AI243793, AI251034, AA551798, H90114, AI254770, AI284543, AA714073, AI054090, AW029515, AI278972, AA219349, AW028950, AW265688, AA678932, AA484892, AW440568, AA626840, AI567391, AW265126, AI217131, W39287, AI049534, AI679759, AA493808, AA371410, AI247101, AI801479, AA846923, AA102737, AI185394, AA564925, AA630947, F34914, AA218684, AW129188, R86977, AA084320, AL079734, AW272599, AA618035, AA804694, H63758, AI354330, AI369076, AW328331, AI520925, H40478, AA947265, AI246996, AI565084, AA501614, AA838120, AW242031, AI251284, AI251203, AI223626, H94979, AI249853, AI446336, AI733856, AW008184, AA598927, AA458534, AA632556, AW081485, AA300177, AA535756, AW328330, AI242614, AI066646, AA629888, AI751753, F01222, AW081610, AI357628, AA877992, AW192402, T94394, AI431513, AA827875, AI879951, AI955029, W45416, AA535216, AI246192, AA557911, AA502110, AA504951, AI417586, AA599080, AA133293, AA493789, AI358712, AI560119, AA873303, H60935, AW162697, H84412, T71936, U89337, AL049776, AL133312, AC005736, AL031597, AC007225, AF053356, AC002492, AC005058, AC003992, AC005899, AC004230, AL021920, AC002312, AL122020, AC007690, AF109907, AL022717, AL031602, AC006960, AL020997, Z95115, |

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| | | | | | Z99716, AL121603, AC002477, AC012384, AC005722, AL109628, AC005274, AC005081, Z97054, AC006115, AF001550, AC002350, Z83822, AC004963, AC005237, AC005015, AC005291, AL050308, Z99495, AI133246, AL080243, AC004859, AC006160, AC007792, Z77852, Z93096, AC006275, AC004796, AC005183, AC007151, AC006026, AP000103, AL137100, AC004651, AC004760, AC004815, AC005386, AC004990, AC006538, AF001552, AC009263, AC004967, AC003110, AC008012, Z95329, AC005370, AC002543, AC003973, Z98946, AL034549, AC005859, AC005089, AL035681, AL049843, AC009247, I34294, AL024507, AL024498, AC003046, AE000662, AC005520, AC005071, AL022330, AC000077, AC006057, AC016831, AC005940, AC000353, M94081, AC003035, AC008015, AC003690, U91321, AC007688, AF196971, AC002316, AC007283, AC005332, AC004702, AC008044, D88268, AL109801, U50871, AL034420, Z83844, AL133355, AF029308, I147924, AC004973, AC005328, AC004032, AC000379, AL008726, AL049570, AL022326, AP001053, AP000555, Z81010, AL049872, AC006064, AC005067, I78810, AC002565, AL078634, AC006430, AL031121, Z95116, AC000134, AL133353, AP000142, AP000089, AC004878, AP000550, AC005777, AC006480, AC004458, AL049839, Z49208, AC006079, AC005695, AC004887, AL035587, AL096773, AL035422, AC005220, AL050307, AC007066, AL132777, AC004941, AF047825, Z93930, AC005030, Z84721, AC006509, AC005363, AL021397, AP000252, AP000030, AP000212, AP000134, AC005837, AC008040, AL133245, D87675, AC007450, AC006023, AC007541, AC005759, AL049636, AC005261, AC007023, AC004771, AC006236, AC004834, AC007051, AC008045, AF015262, AC010205, AC007664, U73169, AC005206, AC005667, AP000008, AP000704, AL031230, AC004912, AC007540, AC002302, AC007546, AC005409, AC006121, AC005846, AL035458, AC006576, AC002551, Z97056, AL109657, AL132987, AC004886, Z95152, AJ229043, AC002128, AC004263, Z73359, AF045555, AC005808, AC005318, AF015416, AC006561, AB023048, AC008018, AC005006, AL049823, AC005516, AB023049, AL139054, AC005180, AL009181, AC007566, AC005011, AC005102, Z93023, Z96811, AL096701, AC003663, U91318, AC004098, AC003665, AL049697, AF196969, AL031680, AC004068, AC012039, AC005730, AC005225, AC006241, AL022313, X60459, AC005874, AF134471, AL117694, AL022320, AL136295, AL117354, AC005094, and AC005666. |
| | HMMAJ18 | 3145 | 666195 | 1 - 335 | 15 - 349 | |
| | HMMAL28 | 3146 | 677446 | 1 - 419 | 15 - 433 | |
| | HMMAL63 | 3147 | 744861 | 1 - 422 | 15 - 436 | AI252124, AL047643, AI061313, AW103415, AL138171, AI090513, AI674290, AI890928, AI890570, AL045451, AA715508, AI054030, AA832152, AII41675, AA683031, AA399158, AI287964, AA837709, AI037914, T94714, AI050007, H94871, H64905, AW403177, F23268, AL039761, N57057, AA313078, F28122, AI521112, AI039451, AI279756, AA429942, AA528405, AA375160, D44626, AII24660, AW339568, AA310796, AC005694, AC005529, Z96074, Z93017, AL022336, AC005588, AC005291, AC005102, AC002375, AC005102, AC006537, AC004647, AC004816, |

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| HMMAP18 | 3148 | 1 - 437 | 15 - 451 | AL109952, U16302, Z99716, AC002565, U55184, AI049869, U95737, AC006571, AC007686, AL031120, AC006344, AC004000, AC008084, AF027390, AL050348, AI251973, AL049757, AL035420, AC004832, AL096791, AL049780, AL118512, AC005527, AP001054, AL009175, AC006948, AL121653, L47124, AC002056, AL035079, AF003529, AC003085, AL031584, AC004967, U91324, AC004257, AL096767, AC002045, AC006449, AP000201, AP000065, AC005972, AC006468, AP000474, Z99570, AL096703, AC003963, AL031319, AP000097, AL035400, AC004817, AC004020, and AC000134. |
| HMMAP45 | 3149 | 1 - 455 | 15 - 469 | AI989372, and AL031589. |
| HMMAP66 | 3150 | 1 - 411 | 15 - 425 | AL046246. |
| HMMAP72 | 3151 | 1 - 393 | 15 - 407 | |
| HMMAQ04 | 3152 | 1 - 482 | 15 - 496 | AA773473, AA532875, AI207476, AA745302, AI370170, T94072, R52008, AI354333, F33490, H13120, H90114, AA335519, AA525807, H15295, AI432298, AA535483, AA713705, AA553332, AA482953, AA214227, AI418661, F35902, F23307, F00211, AW080215, AW381847, AW381904, AA713735, AI054414, H73550, AA626411, AI445774, AI620266, AA828897, AI933681, AI811647, AA018369, W45205, AA425924, AA364006, AL042310, AA626595, AA372881, AA937809, AA192293, AI925462, AA092862, T83057, AA363003, AA584207, C15362, H80989, AA629568, AI312090, AI690497, AA525379, AA856841, AI312784, AI733717, AA513884, AA376358, AA582746, N21300, AA715418, AF047825, AL035405, AL031602, AC005244, Z93241, Z49236, AL035659, AC005295, Z98884, AL031848, U63721, AC004128, AL034379, AC004988, AC002369, AC005828, AL121754, AL022336, AL031291, AC000120, AC004811, U95741, AC005182, AC002416, AC005086, AC002107, AC002106, AP000065, AL133448, AC008928, AL096701, AC005793, AP000270, AL031283, AC002477, AP001172, AC004631, AF148808, AL022327, Z93023, AB015355, AC006101, AC002511, AL122020, AC004967, AC002091, AC004821, AC005914, AP000304, AP000047, AP000032, AP000103, AP000115, AC004801, AP000493, AL049760, AC005993, AL035450, AF207550, AL117694, AC000025, Z98044, AL024498, AC007058, AL022163, AC005527, AL121769, AD000812, AC005049, AP000501, AC005510, AC007226, AC006312, AP000305, AC006476, AC006057, AC007546, AC003041, AL049829, AL031597, AF024533, AC005488, AL021453, AC005529, AC000070, AC005512, AL049548, AC006365, AF031078, AF030876, AL034348, AC007536, AC004013, AJ010770, AL109628, AB020863, AC002352, AC002126, U62317, AF196972, AC005539, AL109952, AC005324, AC005880, AL109623, AL049692, AC005264, AL132712, AC009946, AC006409, AL035683, AC002301, Z82178, AC005280, AL117258, AC005786, AL096766, AL049570, AC004106, AL135879, AL121790, AC004460, Z97832, AP000320, AC004851, Z98200, AC007792, AL008718, AC006077, AL049776, Z82215, AF196960, AL135960, AJ131016, AF015416, AC004525, AC002303, Z85996, AC007308, AC007227, AC000378, Z68192, AC005105, AC006014, AC005088, AP000510, AL049301, AC002319, AL022726, |

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| HMMAQ15 | 3153 | 1 - 600 | 15 - 614 | AF039185, H94332, R18760, Z44908, AI591051, AL022238, AL121580, AI008721, AF178030, AC005694, Y18000, AL133224, and AC005529. |
| HMMAQ35 | 3154 | 1 - 444 | 15 - 458 | |
| HMMAR75 | 3155 | 1 - 275 | 15 - 289 | AA501441, AA632988, AA714955, AA618240, AI889579, C16358, AA136253, AA664126, AA719091, T94394, AA136477, AI355246, AW019964, H68343, AI306717, AW022891, W95552, AA368329, AW373542, AA494057, AA835778, AW237905, AA055422, AA482792, AI054090, AA630854, AI246061, R93919, AA650447, AI819391, AA378207, AI860535, T54173, AI609972, AI133083, AI300818, AI310992, AA847340, H86579, H93152, AA515939, AA670108, AI364568, AA503018, AA736488, AA683069, AA779667, AA831997, AA641112, AA229823, AA550989, AA594719, AA837771, N27874, AA524616, H78984, AI417586, AI679390, AI679898, AI445774, AA228979, AL040717, AA196552, AI821938, R83068, AW341955, AA344768, AL040763, R34070, AL048479, AI284543, H79586, AA602906, AL042667, AL042670, AA302978, AI254770, AA633424, AI251944, AI300054, AI251034, AI251203, AI309059, AI251284, AL041240, T40629, AA376358, AW271071, F23338, R51582, AA613761, AI250552, R32162, AW090333, AI469140, AA713724, AA345594, AI421723, AA230146, AI355103, AA015948, AW084173, AI962030, R70883, AA358178, AA468975, AA053463, AL119156, AI671077, F34506, AL119182, F24164, AA659425, AI337612, AW080118, R70884, T74524, AA483606, AW082104, AA622801, AL041375, AA347969, AA570740, T51874, AA568204, T93105, H40478, F34151, AA078384, AI249853, AL042373, AA583547, T60316, AA018923, AA012829, AW084967, C06210, AA568949, AW149241, AA503142, AI983447, AI354602, W45215, AA846978, F31634, H43183, R66537, AI925869, AL049563, AC005859, AC004982, AL050341, AL023803, AC005017, AC010582, AP000087, AC006544, AL035686, Z99716, AL110502, AC007221, AC005747, AC004849, AL049691, AC010206, AL022068, Z94056, AC002350, AC007114, AL031602, AC004801, AC005726, AC006312, AC004099, AC007563, Z97054, AL132712, AL133269, AJ133269, AL022720, AC008072, AF067844, AC004988, AC005538, Z82206, AC002302, AJ133269, AL049838, AC008008, AC007917, Z95152, AL022329, AC006004, AC005191, AL049540, AL049838, AC008008, AC007917, Z95152, AL022329, |

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| HMMAS88 | 3156 | 728019 | 1 - 609 | 15 - 623 | AA721645, AA303054, AA806653, T94405, AA363078, R02532, T89133, AA729284, AA742815, AW069227, AC004975, AC003665, AF111167, AP000558, AC007382, AL031276, AC009263, AC009516, AC005233, AL022312, AC003070, AL031311, AC004000, L78810, AC004895, AC005017, AF001550, AL049832, AC002470, AL023803, AC005821, AL023577, AC007021, AC003041, AL109798, AC005200, AL021407, AC035086, AC004834, AF029308, Z85986, AL033375, AL035413, AC004257, AC005578, AC005773, AC004955, AC008044, AC004495, AC006445, AC005527, Y12851, AC005808, AL110122, AJ239325, D86566, AL031848, AC007030, AC004019, and AC002991. |
| HMMAS91 | 3157 | 496192 | 1 - 455 | 15 - 469 | AA889566, AA935287, AL049232, and Z93016. |
| HMMAT17 | 3158 | 662705 | 1 - 448 | 15 - 462 | |
| HMMAT26 | 3159 | 681416 | 1 - 474 | 15 - 488 | AA829056, AA572879, AA828844, AB023049, AL022476, AC006312, AC002470, AL049856, AC004526, AC007308, AC004491, AC005736, AC007376, AC007686, AL049776, AC005839, AC005291, AL031657, L78810, AC000052, AC005071, AC005899, AL031680, AC004955, AC006162, AP000512, AC006277, Z97056, AC004448, AL031295, Z85987, AL021707, AL109628, AC004659, AC002365, AC005244, AC006006, AB023051, AC004000, AC007358, |

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| HMMAT78 | 3160 | 733239 | 1 - 352 | 15 - 366 | AC004019, AC006441, and AC005089. |
| HMMAU10 | 3161 | 964281 | 1 - 434 | 15 - 448 | AW028950, F01222, AA878492, AA501867, AA773128, AI798041, AA342238, AA552724, AI249688, AA856815, AA857812, AA580572, AI538236, AA219024, AA303054, AA533660, R99533, AI587467, AA429942, AA666215, AI791659, AI077941, T69879, AI336771, AA618035, AI209075, T71936, AA693484, AA767966, AI271762, AA262908, AA436140, AI038304, AI754567, AI569100, AW192599, AI755214, AA508809, AA481811, AI080307, AA558366, AA664248, AA772016, AA410771, N28624, T56025, AA533054, C16638, AA745373, AA557790, AI754105, AA502991, AW339422, AA302978, AA832025, AA744401, AA612727, AA721560, H78195, AA219069, N67313, AA127222, AI471467, AA668587, AA487569, AA632765, AW007424, AA374240, AW242031, AA113126, AA584484, I156633, AI469392, AA229490, AI583448, AA228824, N70449, AA972523, AI860423, N63149, AA502568, AA385775, AA573000, AI819391, AAR27383, AA157876, AA947265, AA074143, AA371410, AI252010, AI252880, AA902818, AA642823, AI249365, AA343523, AA714073, AW340905, AW023111, AA654482, AA126814, AA524800, AW073498, AA773881, AI929410, AA775188, AI753672, AA595554, AA503008, H60912, AI869786, N59744, AI762528, AI750950, W04464, AA598605, AA665181, AA046906, AA228979, AA229823, AI459879, AA773171, AA206707, I190878, AA019793, AI267450, AA659048, AA523703, T74259, AC005859, AP000194, AL133448, AP000696, AC005180, AL109798, AP000557, AC003692, AC004887, AL031587, AC000353, AC002375, AF129756, AL133163, AL034420, AC006064, AC005694, AC003108, AL008631, AL050321, AB016897, AC004084, AL022323, AC004492, AP000689, AL035086, AC005513, AC005412, AL109628, Z83826, AF205588, AC002310, AL032821, AC007671, AC005829, AC004466, AL022326, AC005231, AP000704, Z83840, AC007546, AC006014, AC007225, Z98946, AB020868, AC004019, AC006241, AL009179, AC006480, AC004491, AP000555, AC007688, AC005899, AC005399, AC004125, AL035249, AL049776, Z95114, AF064861, AL031287, AC005921, AP000510, AC005015, AJ003147, AC006948, AC004531, AL109623, AC005562, AC009516, AC005529, AL035073, AC007637, AC007666, AC007686, AL022316, AC006360, AC005088, AC005081, AC005841, U91323, AC007386, AL031666, AC002316, AP000247, AC005088, AD000092, AC004216, AC003982, AL080243, AF053356, AL121658, AB023048, AD000092, AC004811, AC004216, AC003982, AL080243, AF053356, AC002301, AC005049, AC005102, AL133312, AC002120, AC002365, AP000514, AC004522, AC005755, Z86090, AF030453, AC005220, AC006571, AC006449, AC008044, Z98050, AC005216, AP000466, AL035415, AF038458, AL135744, AC005837, AJ251973, AC005071, AL034418, AC002563, AC005225, AC004797, AC004626, AP000692, AC007934, AC003086, AC006966, AC005519, AL024508, AC004228, AL109758, AL121754, AL022238, Z95152, AL031984, L78810, AC007687, AC005031, AC006006, AB003151, AC006023, AC007277, AL031123, AC004929, AC004551, AL096791, AL117356, AC006285, U80017, AL008716, |

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| HMMAV35 | 3162 | 707274 | 1-389 | 15-403 | AL023513, AC007263, AC004234, AC005902, AC007226, AL031277, Z98304, AC005291, AC006487, AC006115, Z95115, AC005189, AC006312, AP000688, AC008040, AC004596, AC005484, AC016025, AC005058, AL121652, AL049779, AL022162, AC004967, AL050325, AC005082, AF165926, AC004080, AC016027, AC005050, AL031290, AC006581, AC004816, AC004884, AC005874, AF134471, AC016830, AL034554, AC006946, AF111167, AC007055, AL049869, AC004985, AI049553, AC007488, Z97053, AB020864, AC000025, AC002059, AC008372, AC006130, AC004966, AC007358, AC004000, AC006430, AL049569, AP000212, AP000134, U95739, AC003690, AL122023, AC005233, AC002425, AC005914, AC002558, AF111169, AP000246, Z97054, AP000167, AC004217, Z84469, AR036572, U91328, AC004820, AC005725, AL034548, AL133243, AL035660, AI022336, AP000962, AC005913, AL022318, AC007676, AL133246, AL049692, AL035454, AL020995, AC008115, AC006021, AC006406, AP000030, AL031659, AC004878, and AC006379. |
| HMMAV74 | 3163 | 742642 | 1-416 | 15-430 | AC003042. |
| HMMAV85 | 3164 | 784221 | 1-253 | 15-267 | AC000118. |
| HMMAV91 | 3165 | 854043 | 1-382 | 15-396 | |
| HMMBD12 | 3166 | 866824 | 1-430 | 15-444 | |
| HMMBD29 | 3167 | 935775 | 1-501 | 15-515 | AA614263, AW195898, AW080413, AI300810, AA525318, AA767276, AA345400, AI942316, AA426571, AI039672, F33785, R02571, AI032037, AL046094, AA554430, AA830936, AA528234, AA644545, F18098, H58588, U91321, AC005781, AC002310, AL022334, AC004834, AC004762, AC005265, AC008044, AF053356, Z83849, AF118808, AC007327, AC005620, AC004143, AC004878, AC005034, AC004084, AC008009, AL024509, AC002287, AC006043, U52112, AC006275, AL031864, AI096791, AC005089, AI034420, AC007057, AC006449, AC005899, Z82178, AL033403, AC002300, AC006238, AC005666, AC003010, AL080243, AC006450, AC004787, AC002302, AJ229041, Z99774, AC002420, AL034417, AL009174, AL049780, AC006530, AC002390, AC005874, and AF134471. |
| HMMBD33 | 3168 | 702222 | 1-404 | 15-418 | |
| HMMBD79 | 3169 | 490057 | 1-349 | 15-363 | |
| HMMBD81 | 3170 | 728362 | 1-338 | 15-352 | |
| HMMBH76 | 3171 | 959722 | 1-351 | 15-365 | |
| HMMBI50 | 3172 | 868199 | 1-390 | 15-404 | AI469003, and AL049776. |
| HMMBJ26 | 3173 | 681407 | 1-459 | 15-473 | AC004963, and U95740. |
| HMMBJ31 | 3174 | 697735 | 1-457 | 15-471 | AA635985, AI378817, AA628245, T60029, T59956, and AC004985. |
| HMMBM13 | 3175 | 577508 | 1-392 | 15-406 | |
| HMMBM2 | 3176 | 676996 | 1-499 | 15-513 | H64058, H51675, AA424943, AA424944, AA873400, and H64008. |

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| HMMBM341 | 3177 | 855965 | 1 - 525 | 15 - 539 | H92819, and AC005288. |
| HMMBM54 | 3178 | 729350 | 1 - 406 | 15 - 420 | AL044245, AW438555, AI702314, H60864, and AC005971. |
| HMMBM77 | 3179 | 771979 | 1 - 450 | 15 - 464 | |
| HMMBO43 | 3180 | 657400 | 1 - 365 | 15 - 379 | |
| HMMBO46 | 3181 | 856831 | 1 - 476 | 15 - 490 | AW006407. |
| HMMBP10 | 3182 | 964268 | 1 - 359 | 15 - 373 | N83608, and AI127217. |
| HMMBP22 | 3183 | 674272 | 1 - 346 | 15 - 360 | |
| HMMBP27 | 3184 | 682856 | 1 - 546 | 15 - 560 | R71573, R71574, and AC008039. |
| HMMBQ48 | 3185 | 721466 | 1 - 385 | 15 - 399 | Z84483. |
| HMMBR33 | 3186 | 702221 | 1 - 537 | 15 - 551 | R72392, H86264, H86301, AA831388, AI264743, AA229650, AA229931, AA230119, AI125139, W07122, AI499094, AW069807, AA493508, AA229814, AW074398, AA558697, N71724, AI216799, AA714595, AI281754, AA484148, AI561335, AI355206, AA947370, AA377730, R08190, F32705, AA654968, AI474085, AI358501, AA652057, AA649642, AW169537, AW438916, AL041733, AA664770, AI610607, AI281881, AA743972, F28776, AI061296, H85616, AW023511, AA584581, AA528520, AI537185, AW193609, AW238016, AI963720, AI886176, AW069427, AI110770, AI887483, AA680299, AI818620, AA515435, AL037554, AI963095, AI610159, AA125788, AI744739, AI884487, AA569187, AI676218, AI648558, F35113, F36273, W60516, AA733208, AI312149, AA741474, AA578141, M78150, AI284640, N27353, AI287528, AW274345, AA358122, M62249, AI061334, F37223, AI435544, AI061227, AA610491, F19258, F31799, T47739, AW089789, AI143242, AA386111, AW023389, AA100915, AW236342, AW196798, F34558, AL046409, AA836811, AI367975, AA166721, AA664535, AA630362, F37169, AA720702, AI832577, AA457592, AL036523, AI761471, AA095511, AA598586, AA743177, AA569193, AI928790, AI205126, AI079809, N25296, AW406659, AA919037, AI469624, AW410116, AW088058, AI628288, AL120269, AW085740, AW276827, AI350211, F29702, AA775230, AW008317, T16592, AA744220, AI286264, AW243960, AA664407, AI633479, AA640979, AI732186, AA317170, AW193500, AI829964, AA916039, AA654627, AA736472, AI879000, AI612032, AW086257, AA659083, AA394271, AI963786, AA084070, W95976, AI830390, AA484262, C75026, AI200051, AI053672, W95841, AI151261, AA977743, AL040913, AL041412, T40338, AI312309, AI471534, AL133862, AI683577, F31204, AW173651, AA342901, AL119484, AA127354, AI017415, AA491762, AW406447, AW268231, AA284179, AL041368, AW265393, AI281903, AI307588, AI334443, AI255095, F35673, AW072587, AA663482, AI557323, AA130647, AA747480, AI493546, AI914913, AA448858, F32894, AI282336, AI354426, AI471481, AI246409, AI005388, AW193295, F28576, AL119123, |

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| | | | | 15 - 474 | AW151657, AA782334, and AC005295. |
| | | | | 15 - 479 | AL121852. |
| | | | 1 - 460 | | |
| | | | 1 - 465 | | |
| | 3187 | 855942 | | | |
| | 3188 | 757047 | | | |
| HMMBR77 | | | | | |
| HMMBR91 | | | | | |

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| HMMBR92 | 3189 | 791274 | 1 - 330 | 15 - 344 | AL135643, F13749, AI302242, AI753365, AI751162, AW162288, R92640, AI687206, AA947837, AI696793, AW383952, H91844, AA745337, F27015, AA650613, AL046746, F33138, AW381821, AA747889, H48546, M78021, AI628224, AI493264, AI934683, AA779783, AI287921, AI783911, AA714073, AA457754, AW271917, AI927275, AA626829, AA569065, AA262752, AI570943, AI377413, AI357551, AW161636, AA811580, T05319, AW118529, AA339487, AA879053, T03412, AW167154, AA574286, AA558003, AA745356, AA132530, AA613627, AI859280, AA680243, T69679, T03203, AC003688, Z99943, AP000692, AL096818, AC007030, AC006101, AC007993, AC005288, AC004408, Z85986, U29953, AC005971, AP001054, AI022328, AC007536, AC005914, AF015720, AB023049, AC006057, AP000512, AC002072, AI133243, AC002425, AC005746, AC005211, AI031279, AC003035, AC005189, AC005356, AI031297, AC007684, AI229041, AL022316, Z98750, AC006273, AL049869, AP000208, AP000130, Z97195, AC006211, AC004622, AL034548, AL034555, AL033517, AL096763, AC005274, AC006064, AC005740, AP000247, AC018767, AP000553, AC007227, AL031055, Z98884, AC004796, AL035587, AL049712, AF196969, AC006257, AC004216, AP000557, AI034419, AC004750, AL023803, AC005839, AL049776, AC004552, AC005599, AC005899, AC003957, AC004647, AC005104, AC006538, AC004975, AC004999, AC005284, Z86090, AL021397, AC006050, AC004983, Z98200, AC005874, AF134471, U73023, AC005178, Z93244, AC007735, AC000385, AC006581, M87889, AP000045, AF031078, AL031599, AC002302, AC005363, AC005606, AC004477, AF030876, AL121655, AC000026, AC002059, AL031670, AC007250, AC000113, AL031584, AL132985, AC007114, AL080243, AL034409, AC005254, U47924, AC004595, AC005225, AL079305, U91321, AC007263, L48476, AF037222, AC004042, AL021807, AL050402, Z82214, Z84487, AL031778, AC005220, AC008394, AC007277, U50871, Z69917, U73641, AC002558, Z85987, AL031311, AL117536, AL021395, L47234, AL050341, AL133448, AB014077, AC005330, AC004209, AC006139, U62293, U63721, AC005057, AP000514, AI022163, AL096791, AC006120, AC000114, AI049829, AC003664, AC004019, AC004150, AL117340, L44140, AF002223, AL033397, AF190465, AL022151, AC002527, AC005280, AC004895, L06849, AC004913, AF124731, AF020803, AL049867, AP000694, Z95703, AC004066, AC005520, AC005940, AC007630, AL049834, AC006511, AC003101, AL133163, AL132987, AF045555, AL034379, AC004099, AC002377, AC007011, AC005081, AC000052, AC006449, AC004966, AL035659, AC006312, AC004813, AL021394, AL033521, AL035415, and AL035603. |
| HMMBS41 | 3190 | 711733 | 1 - 296 | 15 - 310 | F33940, and AL035652. |
| HMMBS61 | 3191 | 741656 | 1 - 403 | 15 - 417 | T70715, and Z92846. |
| HMMBT27 | 3192 | 682325 | 1 - 324 | 15 - 338 | |
| HMMBU27 | 3193 | 716049 | 1 - 545 | 15 - 559 | AI446464, AA513181, AA513141, AA441788, AI064864, AI469172, AA715270, AI133164, AI754955, AI569086, F28576, R77905, AA136004, AA340747, AA634911, AA649642, AW072923, AA525127, AI049722, AI284640, AA747472, AA618141, AI246796, AW021583, |

AL041706, AA985038, AW419262, H61887, AA515751, AW238278, AI046409, AW238016,
AA306732, AA377730, AA715362, AA604607, AA491762, AI921296, AI357551, F33566,
AA557686, AI590689, AI590958, AI053672, AF150152, AW440976, AI452599, AW236342,
AA327323, AW088224, AI824562, AW084253, AA669522, AI434695, AI929531, AI354426,
F37169, AI281881, H56013, T08638, AW088058, T40077, AW193546, AI709365, AA483034,
AA669251, F18638, AI264743, F33121, AI350211, AA528553, AI079910, AI287651, AW341892,
F23279, AA747480, AA657533, AW276827, H70615, AA357987, AA598997, AI085719,
AI287964, AW338508, AW302013, AI379719, AW131034, AL041513, AA101719, AI198376,
AA977743, AW276435, AI341664, AI688846, AI648858, AW162049, AW193265, AI434311,
T53607, AI312149, AI633168, AA507786, AL043721, AA714453, AA664407, AA598464,
F36273, AW408161, AA469451, AW080134, F26152, AW303196, AA626404, AA318652,
AW407578, AW274349, AI537955, T41242, AI697353, AI286264, AI583594, AL038474,
AW265253, AI471481, AI937850, AI291124, AW088202, AI590772, AI284595, AA551575,
F28776, AA358122, AA610786, AA501722, AW168342, AI358501, AW406162, AA338522,
AI291268, AW193432, W79504, AI613280, AI364809, AA664535, T47588, AW402118,
AA146625, AW072587, AA720702, AW338086, AI537030, AL079645, AA838140, AA502155,
AI801591, AA350859, AA317170, AW089322, AI921541, AA644666, AW301350, T07287,
AI653886, AA381147, AI144330, AA680299, AA244415, AA715609, AA827981, AW022379,
AA177061, F25867, AI431303, AA593752, AW392595, AI079809, T07324, F23327, AI307201,
AL119750, Z78385, AW406447, AW270270, AA947370, AI334443, AA515435, AI281903,
AA586458, AL042856, F03525, AI205126, F34498, AA654741, AA515051, AI830390, AI890923,
T06556, AL043756, AW162489, AI962050, AI312309, AW023270, AA364224, T40617,
AI266133, AA176924, AI148277, W95976, AI279165, AL041733, H58635, AA605274,
AA351893, F35650, AA632845, AA659083, AI219406, AW029038, AA832181, AW166815,
AA323749, AC005019, M87918, AC007842, AC005684, AC005019, AL035685, AL031587,
AL035413, AF053356, S42655, AL031734, M87919, M87891, L81583, AF090044, AC004039,
AC009330, Z98304, AC007551, AL049829, AC005330, AC007114, AL132716, AC005091,
Z13970, U85195, AC009542, AC000052, AC005229, AC005300, AC005971, Z82173, AE000658,
AC006946, AC006480, AL035461, AP000656, Z99495, AC007051, AC006277, AC004593,
AC008055, AC006255, AL021878, AC002460, AC006571, AC008056, Z82184, AL121653,
AL008718, AL033392, Z95331, AP000302, AP000114, AP000046, AC006476, AC004993,
AL031255, AC007537, AC005013, AL031005, Z98043, AF091512, AL133546, AC005180,
AJ003147, AC005018, AC004745, AC004701, AC005215, I17291, AC005602,
AC004492, AC002375, AL022721, AP000507, AC004701, AC005215, I17291, AC005602,
AL133448, AC006012, AC006991, AF064863, Z68269, AP000953, AC004019, AC004854,
AL109963, AL033527, AC006241, U44395, AL110502, AC004495, AC004550, AL078613,
AC004066, AC007151, AC000041, AC000003, AP000697, AC005939, AC016026, AC005237,

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|---|---|---|---|---|---|
| | | | | | AC004695, AC008163, AP000689, AC005078, AB017567, AL049777, AC006273, UR5196, AL008583, AC005695, AL033521, AC005803, U02054, AF018071, Z49918, AC005343, AC005031, AC007243, AC003108, AL031346, AL080238, AC003684, AC004502, AP000230, AP000144, AC004865, AL109967, AC002980, Z82206, AC007312, AC007406, AC006996, X52851, AL049845, Z82215, AC005331, AP000275, Z82244, AP000105, AP000037, AL050333, AC005154, AL050318, AB020868, U80017, AF019413, AL049766, AC006125, AP000359, AL049869, AL133243, AC004913, AC004448, AC004408, AC004180, AC005608, AL031280, AC009247, AF064857, AC002418, U04737, AC007298, AL136130, AC012599, AC004638, AL109654, AL034420, AL121748, AC007488, AL096767, AL109627, L34079, AL021068, AC020663, AC003982, AC004062, AI121576, X54175, AL022315, AC004953, AC007191, AC002091, AC006509, AL031291, AF161343, AC004895, D83989, AC006071, AC006392, AP000855, AC004886, U50429, AC000095, AF196779, X75335, AC003007, AL078460, M87916, AC004973, AF196971, Z95114, AC007773, AC004941, AF047825, Z98036, AL049776, AC004447, AC004686, AC007845, AC008009, AL050312, AC004699, AL008630, AC006561, AF124523, Z99128, AC005815, AC004690, AC002289, AC005324, D84394, AL021939, U57005, AF027390, AC004025, Z82192, AC002133, AL009177, AC005339, AC000080, AC006292, AC002078, AL132774, AC005663, AC003695, AC004918, AC002301, AL031687, and L07900. |
| HMMBU75 | 3194 | 490083 | 1 - 350 | 15 - 364 | AC006987. |
| HMMBU78 | 3195 | 773426 | 1 - 696 | 15 - 710 | W02201, H78487, and H78389. |
| HMMBV17 | 3196 | 662684 | 1 - 463 | 15 - 477 | AI792272, AL121235, AI954248, AA018823, AI698342, AA654781, AI866487, AA730798, AI471887, W24602, AI470646, AI468899, AA679936, AL138455, AI312309, AA478355, AI732120, AW085780, AA680243, AI049508, AW089101, AW003867, AI088768, AA533333, AA279365, AI366993, AA012964, T03217, AI950983, AA640410, AA640430, AI754336, AW023302, AI611895, AA088727, AW275498, AA515644, AA746719, AI358384, AL041146, AL138396, AI431303, T61978, AI753929, AL119649, AA833896, AA833875, AI791913, AI792133, AI821714, AI821044, AA081462, AA876445, AL037574, AA099939, AL046519, AI816141, AL079637, AL040921, AA228349, AL036413, AW022065, AL044441, AI042311, AA847952, AA729697, AA634853, AL036037, AA601876, AA483256, AA582549, AW263415, AI873852, AW380254, AI633479, AI732151, AI828710, AA774059, AI457397, AA515440, AL121207, AL046457, AA493136, AI754567, AI754105, AI755214, AA570602, AA303007, AI124610, AL134519, AI680562, AI886654, AL134972, N99489, T09124, AI609464, AA478866, AW022406, AI754253, AA588001, AW327868, AI499451, AI691091, AI524515, AI635217, AF034176, N49368, T60156, AI572924, AI991323, AI630176, AL119306, AA503039, AA618452, R17793, AA516058, AW168383, H72530, W20344, F05324, AI862939, AA493708, AW028429, C16438, AA916171, AA358515, R94326, T73699, W52505, AI821785, AL118991, AA377385, M77938, AI079389, AL042635, AI751216, AI446682, AW410354, AA478867, AA551552, |

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|---|---|---|---|---|---|
| HMMBV53 | 3197 | 727572 | 1 - 201 | 15 - 215 | C06339, AI700109, AA846952, AL037550, AI675305, AA449594, AW103676, AC005358, AC005587, AL022163, AC004813, AL021154, AP000354, AC004821, AC005484, AL031575, AC009263, AC005145, AL031722, U82696, AC003006, AI031677, AC004000, L78810, AL049845, AC005065, AC006388, AL133245, L30117, AC001082, AC002300, AC004812, AC005971, AC007308, AC002483, Z94277, AC007011, AP000476, AL021328, AL031123, AC007225, AL080248, AL034423, AL030999, AL109963, AL023653, AP000569, AC002368, AC004819, AC002553, AC007172, AP000350, AC004895, AL031650, AC002429, U82083, AL109837, AP000689, AC007358, AC006254, AL117328, AC003104, AI049759, Z99496, AC006203, AC007358, AC005903, AC004836, AC003025, AC004991, AC004466, AF139813, AC004228, AL049823, AL008629, AP000656, AC002404, AC003964, AC010209, AL031296, AL008634, AL049779, AP000349, Z98752, AC002996, AL031584, AC006537, AC007002, AL121882, AL020997, AC005544, AL035089, AC008372, AC006040, AC007462, AC004492, AC002385, AC004471, L77570, AL049776, AC004673, AC007655, AL109865, AC004196, AC004796, AJ009632, AL021937, AC004019, AC007371, AC005071, AF002223, Z73420, AC005234, AL034345, AC006468, AP001050, AP000070, AC007590, AC002115, AC005102, AL035683, AB023049, Z74739, AC004525, AC002303, AC005550, Z82201, AL031667, AL035688, AC005527, AC003669, Z98884, U96629, AF196779, AC006271, AL031775, AC004622, AC005951, AC005908, AF001549, U85196, AF164623, AL031257, U07562, AI035634, AF019664, AC006453, AP000359, AC004595, AC005682, AC007649, AC006430, AC005004, AL008637, AC007444, AC005480, Z82901, AC005031, AC005348, AL118512, AP000201, AC010168, AC004864, AC004519, AC007304, AP000097, Z97181, AC004691, AC005519, AL023805, AP000556, AC007262, AC006050, AP001037, AP000240, AC006160, AL049775, AL022323, AC005209, AL049829, AL096712, AC004263, AC004841, Z86061, L07900, AC002347, D14436, AF048728, AC002082, Z81314, AC006146, AL022312, AL031295, AL049692, AC004822, Z98941, AL031427, AL035448, AF001550, AC005669, AC007685, X55933, AF222686, AL021808, AL034421, AP000112, AC004087, AC008163, AP000297, Z68226, Z98047, AL034421, AP000044, X55924, AL022329, X54180, AL117354, AJ003147, AL031054, AR036572, U91328, AC004950, X63773, and AE000660. |
| HMMBV71 | 3198 | 490078 | 1 - 369 | 15 - 383 | T73734. |
| HMMBX63 | 3199 | 729268 | 1 - 313 | 15 - 327 | AA905066, AA767350, AI696646, H71659, Z98036, AL109758, AC005914, AF111168, AC002425, AC005072, and AC004551. |
| HMMBZ91 | 3200 | 753799 | 1 - 411 | 15 - 425 | AC005877. |
| HMMCA43 | 3201 | 715085 | 1 - 434 | 15 - 448 | |
| HMMCB67 | 3202 | 735293 | 1 - 755 | 15 - 769 | R10827, AA165653, AA678092, AA165550, and Z95152. |
| HMMCC09 | 3203 | 625368 | 1 - 468 | 15 - 482 | W27527. |

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|---|---|---|---|---|---|
| HMMCD21 | 3204 | 670651 | 1 - 182 | 15 - 196 | AF067844, and AF143313. |
| HMMCE16 | 3205 | 577388 | 1 - 283 | 15 - 297 | H71992, AA508364, AA508371, and AI174714. |
| HMMCE26 | 3206 | 935148 | 1 - 522 | 15 - 536 | |
| HMMCF94 | 3207 | 913661 | 1 - 485 | 15 - 499 | AA565911, AW238341, AI904445, AI143653, AI192839, AA209436, AI709180, AI251944, AL046818, AW073950, F16409, AW390601, T05617, R19199, AI445557, AW337805, N54397, AI917904, AA337978, AI269639, AA299351, C06329, AA678616, H61871, AI080732, AI619994, AI054090, AA566084, AA502101, AA364315, AA582746, AW373645, H68343, AI926597, N23919, AI633386, AI246061, R89560, H53085, AW057719, AA372799, AT791291, AT791469, AI249365, AI567391, AI732514, AA527109, AI732243, AA658934, AA054055, AI298079, AA610255, AI284543, AA825784, AL138252, AA114131, AL042373, AI254770, AI783820, AL042667, AL042670, AA586433, W96277, AA081770, AA603432, AI571161, AW190484, AI251034, N64437, Z85987, AJ236701, AC005520, AL031685, AC000085, AJ006995, AL034421, AC006241, AC002101, AC005256, AC007363, AC007263, AC003070, AC007114, AL078581, AL031657, AC004491, AC004985, AC007055, AC004526, AC004991, AC002470, AC005324, AC006023, AC004686, AC004687, AL080243, AF053356, AP000692, M26434, U07563, AC005730, AC002351, Z98752, AL022311, AP000359, AF134726, AL031651, AP000350, AC004834, AL034549, AC004383, AC003030, Z97353, AC004583, AC005914, AC006512, AC004859, AC006441, AL031681, AC004796, Z85986, AL035405, AC006251, AL031295, AC002996, AP000228, AL035658, AP000088, Z98050, AC005565, AC004531, AC004858, AC006312, AC005535, AC005920, AP000140, AC002369, AF109907, AC002350, AL021918, AF196969, AC005844, AF165926, AC005993, AC005089, AC002395, AC009516, AC005399, AC005696, AF217403, AC004131, AC005409, AL109827, AC005067, AJ251973, AF001549, D43727, AL034418, AL050308, AC000379, AC005911, AP000126, AP000204, AC002312, AF001552, AL096712, AC004019, AC005049, AI122322, U52112, AC006273, AC005212, AL035086, AF196779, AF111163, AC002504, AC006121, AC000082, L78810, AL031229, AC005837, AC004150, AC006111, AC006277, AL031588, AC006501, U91323, AC003029, AC005071, AL049643, AL031803, AC002407, AL031848, AC007486, AC005037, AC007225, AL049766, AL049591, AP000244, AL031678, AL034420, AC004884, AL133445, AL021878, AL109758, AL049856, AJ003147, AC006317, U85195, AL049653, AC005206, AC005003, AL079301, AC004223, Z99716, AC005231, AC002994, AL031597, AL049569, D84401, AP000704, AE000658, AL008734, AC005211, AL133163, AC010206, AC004844, AC005328, AF091512, AL031291, AC002426, AL031672, AC000025, AC022326, AF067844, AF045555, AC006001, AC002551, AL035455, AC005924, AL031846, AL022326, AC006064, AC005736, U95740, AL035415, AC004953, AC003687, AC000070, AC005667, AC011625, AL023694, AJ133269, AC009501, AL031123, AC007388, AC005081, AC006360, AC001625, AL023694, AJ133694, AC009501, AL031123, AL133245, AC004814, AL096701, AC005899, AF207550, AC005529, AC006511, Z98950, Z95115, D87675, AC009405, AC001227, U82828, AP000510, AP000501, Z95152, AC005005, |

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|---|---|---|---|---|---|
| HMMCH04 | 3208 | 944069 | 1 - 670 | 15 - 684 | AC004912, AC007546, AC005552, AC004967, AL049869, AL031432, AC007450, AC002365, AL008730, AL031737, AP000008, AC006571, AC007021, AL122020, AL033527, D87012, AC006126, Z75887, Z93244, AL049780, Z97053, AL121769, AC009263, U91321, AC002404, AC007308, Z68164, AL049843, AL121603, AC004020, and AC005940. |
| | | | | | AI049671, AI034206, AW192002, AA442431, T59937, AW069110, AI678812, AA515742, AI679394, AI925423, AI679902, AI523205, AA676592, AA642809, AW392414, AA362349, T07903, AI123488, AA946848, AI471455, N63358, AI687343, AI206078, AW079877, AW270329, AA362348, AA640310, T03576, U48471, AC005940, AL020997, Z94801, AC006088, AC004849, AL121658, AC006064, AC005003, M33132, AC004589, AC004645, AL080242, AL117328, AC003077, AP000514, AC004584, AC003007, AC004895, AL121769, AC006111, AC005632, D84394, AC005696, Z99943, AP000354, AL109952, AL049757, AC004148, AL031281, AL035457, AC005089, AC007312, AC000353, AC005837, AL035413, AC004686, AF030933, AC005412, M17262, AC002050, AC005944, AL133382, AC004506, AL035398, AL109963, AF045555, AL022322, AL022162, Z99129, AP001053, AC006367, AC003689, AC006455, AI031770, AP010770, AC005081, AC005081, AC006536, AC005746, AC005274, AC005015, AC002546, AL035588, AL080317, AL031311, AC005358, U78027, Z98051, U07563, AF064859, AC003950, AL022069, AC006141, AC007565, AF064858, AP000045, AP000113, AC004841, AC003950, AC009399, AC005365, AC007066, Z93930, AP000694, AC018633, U01337, Z84466, AL109623, AC005763, AC004035, AC005362, Z49237, AC000069, AL096703, AC003080, AC004893, AC005763, AC004996, AL008635, AC007326, AC006597, AC004796, AC002316, AC007421, AP000502, AC000502, AC002089, AC004984, AL122020, AL024508, AC006226, AC004638, AC004585, AC000120, AC007376, AC007917, AL049835, AC006057, AL049779, AF029308, AC005225, AL121757, AL132987, AL031587, AC001231, AP000511, AC009501, AL023553, AL021707, X99832, AC003029, and U80017. |
| HMMCI03 | 3209 | 923771 | 1 - 385 | 15 - 399 | |
| HMMCI43 | 3210 | 864098 | 1 - 430 | 15 - 444 | H60700, AA465255, AA984765, R51650, N31773, R93782, AI265884, N56201, and AF151819. |
| HMMCI67 | 3211 | 587819 | 1 - 479 | 15 - 493 | |
| HMMCJ83 | 3212 | 855918 | 1 - 425 | 15 - 439 | AC002302. |
| HMMCJ93 | 3213 | 708060 | 1 - 661 | 15 - 675 | |
| HMMCK81 | 3214 | 666792 | 1 - 346 | 15 - 360 | AC007165. |
| HMMCN36 | 3215 | 919484 | 1 - 463 | 15 - 477 | |
| HMOAC95 | 3216 | 677110 | 1 - 206 | 15 - 220 | |
| HMPAA21 | 3217 | 670114 | 1 - 546 | 15 - 560 | N59555, AA362113, and AA362136. |
| HMPAE62 | 3218 | 754152 | 1 - 270 | 15 - 284 | AA362224. |
| HMPAPS2 | 3219 | 709621 | 1 - 264 | 15 - 278 | |

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|---|---|---|---|---|---|
| HMPBA34 | 3220 | 705509 | 1 - 450 | 15 - 464 | AA362267, AA362266, AF017104, and AC016831. |
| HMPBB1I | 3221 | 855911 | 1 - 318 | 15 - 332 | AA362334. |
| HMPTA49 | 3222 | 723299 | 1 - 324 | 15 - 338 | |
| HMPTE27 | 3223 | 684607 | 1 - 394 | 15 - 408 | |
| IIMPTG84 | 3224 | 954383 | 1 - 491 | 15 - 505 | AC002112. |
| HMPTI69 | 3225 | 932799 | 1 - 355 | 15 - 369 | |
| HMQAB40 | 3226 | 712805 | 1 - 485 | 15 - 499 | AI523941, AA055449, AA232904, AA233033, and AA05548. |
| HMQAG45 | 3227 | 723493 | 1 - 347 | 15 - 361 | |
| HMQAL95 | 3228 | 684917 | 1 - 307 | 15 - 321 | |
| HMQAO34 | 3229 | 706341 | 1 - 250 | 15 - 264 | |
| HMQAP31 | 3230 | 825480 | 1 - 208 | 15 - 222 | AW044231, and AC003681. |
| HMQAS25 | 3231 | 923515 | 1 - 469 | 15 - 483 | T87899. |
| HMQAU20 | 3232 | 384780 | 1 - 359 | 15 - 373 | AL021453. |
| HMQAX65 | 3233 | 856318 | 1 - 295 | 15 - 309 | |
| HMQBD30 | 3234 | 714031 | 1 - 352 | 15 - 366 | AA933089, AI680336, AW157317, AA523285, AW170427, AW170278, AA974441, AI027987, AI074894, AA102451, AI631081, AI591067, AI992135, AA643152, AI357176, AA577581, AA148225, AI031764, AW166779, AI857843, AI027266, AI568168, AA862399, AA205564, AI923284, AI951177, AI185759, AI924241, AW193281, AA779812, AI280897, AI928891, AI580036, AA824336, AA523194, AI208491, AW162293, AA417116, AA512937, AA166670, AI138933, AA410871, AA843221, AA497015, AI090410, AW327970, AI366939, AI891047, AI372093, AA417257, AA776942, AI083704, AA776511, AA580420, AA860537, AA716753, AI094406, AA827004, AI817572, AI027989, AI673583, AI276716, AI245211, AI986389, AI073857, AA595784, AI816482, AI751720, AI439302, AA976926, AA771950, AA088664, AI520873, AA813071, AA458901, AA878692, AI252636, AI039067, AA860792, AA399535, AA722780, AI538971, AA971121, AA995822, AA722354, AA480057, AI887538, N24774, AI282434, W15347, AA757714, AI192786, AI929797, AI085365, AI439295, AA971044, AA428428, W15347, AA923667, AW162981, AW161746, AA383387, AA158971, AI073973, H92319, W95395, AA923667, AA890640, AA581636, AA158959, AA640130, N32793, H17478, AAI30481, AA156280, AA890640, H29049, T58022, AA886217, AW172803, AI761395, AA235711, F36843, AA907137, AAI30482, AA284912, AA426152, AA643884, AW250923, F17431, R49138, AW130002, AA488204, AA284912, AI004901, AI566499, AI751319, AI869823, AA662261, AA643919, F33987, AW148600, AA669508, AI537266, AA587451, AA477813, AI885826, T86930, AA374990, AA505425, AA397788, N94618, AA296827, AA553934, AA158603, AA459096, AA235724, R17686, AA402833, F03779, AA635762, AA877354, F02931, AI886255, AI768303, AW068766, AI369668, AA421441, AA410723, AA402684, AA969529, AA852879, AI309009, AA402130, |

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| HMQBH12 | 3235 | 825460 | 1 - 250 | 15 - 264 | AA421351, AA421619, AA410870, AW375304, AW175934, AI814213, AA625735, AW163631, AL045635, AW075260, AW327969, AA401998, AA411213, F01865, AA299729, AA146597, AA428874, F04770, AA664466, AA662445, AA284999, AA404572, AA351185, F11009, AW298320, AI800313, AJ131182, AR033742, AJ249366, AC005197, X76980, Z32554, and U89427. |
| HMQBL13 | 3236 | 723212 | 1 - 397 | 15 - 411 | AI800901, AI651852, AI654079, AI500417, and AL008730. |
| HMQBL17 | 3237 | 664904 | 1 - 266 | 15 - 280 | |
| HMQBL54 | 3238 | 708075 | 1 - 292 | 15 - 306 | AA809189, AC005280, AL110150, J03818, and AC002115. |
| HMQBM27 | 3239 | 855902 | 1 - 265 | 15 - 279 | AI373509, AW015352, AW131241, and AI500443. |
| HMQBM59 | 3240 | 708073 | 1 - 332 | 15 - 346 | |
| HMQBN41 | 3241 | 683723 | 1 - 249 | 15 - 263 | AC005994. |
| HMQBO17 | 3242 | 720569 | 1 - 306 | 15 - 320 | |
| HMQBP18 | 3243 | 707279 | 1 - 356 | 15 - 370 | AW369276, AF199364, and AC004893. |
| HMQBP26 | 3244 | 684887 | 1 - 297 | 15 - 311 | W79802, and AA773227. |
| HMQBP54 | 3245 | 855900 | 1 - 321 | 15 - 335 | |
| HMQBT65 | 3246 | 708065 | 1 - 294 | 15 - 308 | AI887232, and T78614. |
| HMQBU96 | 3247 | 765162 | 1 - 404 | 15 - 418 | AA453179, R71855, AA043907, F07759, AW248202, AA302385, AL047640, AA284122, H18360, H19959, H20698, H21242, AA434198, H46841, AA292979, AW247172, D52938, AA131344, AA203288, Z45125, H85906, AA017593, R81429, AW381812, AW392072, T19067, R55922, AA306741, AW381820, AW381788, T32135, R48687, W93644, D56251, AA308717, R59408, AA017424, R61099, H08032, R19873, AA321261, AA069353, AA410846, AA843927, W93904, AA984067, AA477522, AA523404, AA582827, AI885457, AA861765, and AC005067. |
| HMQBW05 | 3248 | 932509 | 1 - 146 | 15 - 160 | AA381112, T29768, and AA381110. |
| HMQBW76 | 3249 | 954587 | 1 - 204 | 15 - 218 | |
| HMQBX07 | 3250 | 954058 | 1 - 255 | 15 - 269 | |
| HMQBX35 | 3251 | 707280 | 1 - 353 | 15 - 367 | |
| HMQBX74 | 3252 | 932510 | 1 - 122 | 15 - 136 | |
| HMQBY10 | 3253 | 968348 | 1 - 404 | 15 - 418 | |
| HMQBY34 | 3254 | 706338 | 1 - 119 | 15 - 133 | |
| HMQCC67 | 3255 | 740625 | 1 - 304 | 15 - 318 | |
| HMQCK09 | 3256 | 384771 | 1 - 192 | 15 - 206 | |
| HMQCO77 | 3257 | 839604 | 1 - 359 | 15 - 373 | AI910103. |
| HMQCV51 | 3258 | 725828 | 1 - 346 | 15 - 360 | |
| HMQDA84 | 3259 | 783174 | 1 - 243 | 15 - 257 | |
| HMQDC34 | 3260 | 855890 | 1 - 335 | 15 - 349 | N99626. |

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| HMQDC96 | 3261 | 765810 | 1 - 298 | 15 - 312 | Z97989. |
| HMQDD41 | 3262 | 575536 | 1 - 347 | 15 - 361 | |
| HMQDE85 | 3263 | 963366 | 1 - 333 | 15 - 347 | |
| HMQDN16 | 3264 | 712588 | 1 - 343 | 15 - 357 | AC005576, AF117947, and U77631. |
| HMQDN77 | 3265 | 772436 | 1 - 406 | 15 - 420 | |
| HMQDQ84 | 3266 | 783176 | 1 - 419 | 15 - 433 | AA630827. |
| HMQDZ19 | 3267 | 940694 | 1 - 155 | 15 - 169 | |
| HMRAD49 | 3268 | 868185 | 1 - 398 | 15 - 412 | H13140, AA613909, AL031594, AL031274, and AP000696. |
| HMRAD74 | 3269 | 765975 | 1 - 560 | 15 - 574 | H72232, AA650447, AA713724, AI678754, AA001345, AC004805, U91318, AC003663, AP000466, AL021578, AL109946, AC004832, AC005911, Y10196, AC007546, AC005225, AC007993, AL049843, AC005778, AP001052, AP001057, AC007057, AC004685, AC004967, AC005081, AL034417, AF031078, AF030876, Z98304, and AL031602. |
| HMSAC03 | 3270 | 960949 | 1 - 401 | 15 - 415 | |
| HMSAH89 | 3271 | 935429 | 1 - 470 | 15 - 484 | N35693, AA312724, AI915293, AA381762, H54210, AA347927, H71250, AI460103, AA593471, AA347930, AI623563, AI270476, AA601986, AA487219, AI076236, AI338426, AA487079, AW383952, R92301, AA358623, AA634209, F33138, AA604843, AI305258, AI090334, AI791150, R70883, AA372778, R70884, AA599423, AA573213, AA761795, AI803809, AA702618, R90740, AA526757, AA650135, AA341228, AA367788, AL046746, AW265688, H80203, AA828867, AA614010, AI284108, AI888405, AA939320, AA828047, AA781504, H85059, AI471572, AW264264, H40017, AA551339, AI096403, AA347565, AW407919, Z99496, AP000493, AL031431, AP000964, AC003689, AC000118, AL034548, AC006270, AL022323, AL078477, AC008101, AC016027, AC016830, AJ250915, AL096702, AC009275, AC002558, AL080243, AL020996, Z49237, AC003663, AC005209, AC008079, Z93023, AC002350, AC007686, AC002106, AC006080, AC005914, AC007784, AJ010597, AL034449, AC004890, AC007057, AL049872, AL034418, AL031735, AC007435, AC005193, AC002045, Z82215, AL035703, AL049780, AC006530, AC000095, AC005512, AC007436, AP000336, AL049540, AP000215, AP000475, AC006211, AC008154, U91321, Z49194, AF008243, AB015355, AC006602, AC004934, AC004525, AC007136, AL034555, AL035653, AC005874, AF134471, AC005081, AC005229, AC001228, AL121595, AC004865, AC006117, AC005257, AC006261, Z68756, AC005944, AC004685, AL096701, AC000052, X87344, AL049830, AC004019, AF003626, U78027, AL049709, AL022313, AC002073, AL035422, AL109837, AC004859, AL121576, AL032821, AC006501, AC008122, AC004061, AC010205, AC004196, AL031055, AC005295, AL020997, AC005409, AL035443, AC007277, AL035415, AL117258, AC005832, AL139054, AC002398, AC003041, AL021397, AC006973, AL031681, AC005725, AC005476, M90058, AC002398, AC003041, AC002996, AC005399, AC005242, AC005242, AC007993, AC007546, AC009363, AL121655, AF111167, AC000134, AL109627, AC005726, AL008718, AC005921, AL096791, AC008009, AC006487, AC006480, U29953, AC002057, U82668, |

| | | | | | Accession Numbers |
|---|---|---|---|---|---|
| HMSAI08 | 3272 | 1 - 372 | 15 - 386 | | AF165176, AC004638, AC005177, AL022345, AL022165, AC007386, AC006449, AP000018, AP000160, U73649, AC000092, AC005581, AC003109, Z97630, AL049610, AC005905, AL022397, AL034379, AC002039, AL023803, AC005041, AF029308, AC005003, AP000339, AC003006, AP000217, AC006515, AC005225, AC004185, Z93848, AP000152, AP000011, AP000509, D87009, AL109839, AL031447, Z97056, AL121652, D84394, AC006271, AP000962, AC005037, Z99943, AC002553, Z98884, AL022239, Z82184, AC005513, AL121825, AC004985, AL034402, AC004594, AC005261, Z68164, AC004257, AC000015, AL008725, AC003077, AP000502, AC006597, Z95113, AF207550, AL021707, AL121877, AF134726, L47234, AC005342, AC007773, AL031729, AC007695, AP001059, and AP001058. |
| HMSAI44 | 3273 | 1 - 363 | 15 - 377 | | AC007401. |
| HMSAO46 | 3274 | 1 - 408 | 15 - 422 | | AW452096, AW450553, AI887415, AL042655, AL042654, AW295630, and AL035405. |
| HMSAP87 | 3275 | 1 - 341 | 15 - 355 | | |
| HMSAQ64 | 3276 | 1 - 374 | 15 - 388 | | W38562. |
| HMSAS62 | 3277 | 1 - 373 | 15 - 387 | | |
| HMSAX08 | 3278 | 1 - 448 | 15 - 462 | | |
| HMSAX13 | 3279 | 1 - 352 | 15 - 366 | | |
| HMSAX31 | 3280 | 1 - 365 | 15 - 379 | | |
| HMSAX32 | 3281 | 1 - 345 | 15 - 359 | | |
| HMSAX33 | 3282 | 1 - 451 | 15 - 465 | | F24792, H77666, AA594145, AC005971, AC004491, AC003663, AC019014, AL133245, Z95703, and AC005602. |
| HMSAX85 | 3283 | 1 - 317 | 15 - 331 | | |
| HMSAZ07 | 3284 | 1 - 186 | 15 - 200 | | |
| HMSBB19 | 3285 | 1 - 560 | 15 - 574 | | AI910889, AI524744, AI347447, R72293, AA765015, AA736789, AA808343, AA865106, AW182983, R71382, R72338, and R70163. |
| HMSBB44 | 3286 | 1 - 339 | 15 - 353 | | AB033020. |
| HMSBF59 | 3287 | 1 - 416 | 15 - 430 | | AC004687. |
| HMSBF84 | 3288 | 1 - 235 | 15 - 249 | | |
| HMSBH79 | 3289 | 1 - 296 | 15 - 310 | | |
| HMSBI72 | 3290 | 1 - 331 | 15 - 345 | | AL035073, and AC007446. |
| HMSBM43 | 3291 | 1 - 605 | 15 - 619 | | AA577706, AI733856, AA315052, AA491941, AA904275, H67155, AA657835, AA664135, AI061313, AL079734, H79591, T74524, T46960, R76686, AA632744, AW271904, AL042667, AL042670, AW023111, AW069412, AW104161, AA071334, H60813, AI380617, AW265688, AA525423, H07953, AA641651, AI791185, AI056177, AA410788, AI754170, AA555232, AI541154, AA833896, AA833875, N29105, AI560866, N66065, AA595770, AI569401, AA502149, AW265614, AL134330, AL031005, AC007376, AC006071, Z97054, AC005722, |

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| HMSBM81 | 3292 | 1-339 | 15-353 | AC007182, AC006312, L78833, AL050332, AL033397, U91323, AC005696, AC004217, AL031282, Z93930, AL031588, AC004812, AF117829, AC007349, AC004771, AC005839, Z85986, AL008726, AL121603, AP000251, AC002565, AC008072, AC005914, AP000212, AP000134, AP000030, AL031447, AC004895, AF111168, AC007537, AC007308, AC004841, AC005527, AL096703, AC002550, AC004067, AL035249, AC006538, AL049611, AC007536, AC002302, AP000558, AL031228, AL096791, AL136295, AL109914, AL022165, AC007664, Z84466, AC004797, AL024507, AP000689, AC007052, AC008018, AC005081, AP000043, AP000111, AC004655, AC007421, AL022329, Z84487, Z84469, U95742, AL031281, AC005529, AC002425, AF109907, AC004526, AC005482, AL031657, A1022721, AP000694, AC005412, AC005972, Z82244, AC007216, AC008154, AC006501, AL121658, Z98304, AB023050, AC006121, AC004491, AC006001, AC005089, AP000152, AC002477, AC002400, AP000140, AC005338, AC006006, AP000511, AC005670, U91318, Z73358, AC007637, AC007055, AL008582, AL035086, Z93023, AC016027, AC005082, AL080243, AC004253, AC016830, AC002472, AF031078, AP000011, AC004874, AP000088, AF030876, AC005901, AC009516, AF129756, AL109984, AC004821, AL133244, AP000353, AF196779, Z85996, AL050341, AC004887, AC006531, AC004805, U95740, AC003983, AP000116, AC000025, AC004854, AL080317, AC000052, AL133243, AC007546, AL023575, AL022327, AC004019, AL031311, AC005088, AL139054, AC008009, AC006277, AL049779, Z82176, AL049694, AF196969, AC000090, AL031284, AL031666, AC007684, AC007298, AC005037, AC003108, AC005921, AP000114, Z92546, AL034421, AC005288, Z83846, AC005841, AC006449, AF091512, AL021918, AL133246, AC006509, AC004656, AL008715, AC007371, AL021920, AP000512, AC009405, AP000514, AF024534, AC016025, AL049832, AC005740, AL031733, AC005751, AL121595, AC006946, Z95152, AC006014, AC007057, AP001053, AC002070, Z98751, AC005971, AL031055, AP000240, AC005209, AL031120, AC006011, AC005488, AL121769, AP000008, U47924, AC005880, AF064861, Z83844, U96409, AP000552, AL035458, AL031683, AC004590, AL110502, AL031681, AC004955, AC004816, AC002347, AC009248, AC004622, AC005306, AC006236, AJ003147, AC007938, AC007384, AC004148, Z98884, AC006120, AC007406, and AC005913. |
| HMSBN71 | 3293 | 1-227 | 15-241 | |
| HMSBO55 | 3294 | 1-135 | 15-149 | AI579937, N47104, AA805339, AA768366, AI078743, AC005774, and Z93019. |
| HMSBP46 | 3295 | 1-127 | 15-141 | |
| HMSBP80 | 3296 | 1-373 | 15-387 | |
| HMSBQ93 | 3297 | 1-406 | 15-420 | |
| HMSBS51 | 3298 | 1-348 | 15-362 | |
| HMSBS63 | 3299 | 1-440 | 15-454 | |
| HMSBS86 | 3300 | 1-533 | 15-547 | AL121998, D83253, Z70689, and Z97054. |

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| HMSBU22 | 3301 | 677327 | 1 - 230 | 15 - 244 | AW117257. |
| HMSBU68 | 3302 | 709231 | 1 - 295 | 15 - 309 | |
| HMSBV28 | 3303 | 970579 | 1 - 429 | 15 - 443 | R94422. |
| HMSBX38 | 3304 | 761392 | 1 - 467 | 15 - 481 | |
| HMSBX59 | 3305 | 558203 | 1 - 291 | 15 - 305 | AI621141, AA640155, AA569180, AA376315, AI922061, AA664366, AI052560, AAS01775, AA280232, AA055576, AA258511, AA487808, AI940701, AI820994, AAS93381, AA180278, AW238615, T03028, AA641592, AA601152, AA720812, D59168, T62761, AI132952, T85549, T47477, T47541, N62150, AA353087, R90980, AI800268, AA780549, AA584099, AA225638, N32456, H54464, T03216, H13261, AL117339, AF205588, AL022345, U82828, AL049710, AC005386, AC005018, AF049895, AP000146, AL022576, AC007488, AL121877, AC008929, AC007380, AC004075, AL023581, AC002412, Z82212, AC005297, AC004677, AC005341, AL096827, Z99571, AC004855, AC007567, AC004158, AL022310, Z93019, AC002429, AF172277, AL110505, Z82211, AF003529, AC016046, AC007514, Z83745, AC006481, AL136297, AL022394, U82696, AL117351, AC005076, AL030996, AC000114, AL049844, AL050339, Z92844, AL008722, AC006462, AL049589, AC004470, AC003106, AL080248, U69730, AC002070, AC000378, Z71187, AL022154, AC008169, AC004842, Z98255, AC006946, AC006548, AC009802, AL049743, AC006313, AL050309, AP000083, AC004029, AP000692, AC005378, AC002564, Z74477, AC002463, AC004908, AC002449, AL049778, AC004083, AC004049, AL022101, AL121782, AI121654, AC002454, AL133247, AF070718, AL009047, AC006152, AC011198, AC006070, AC007317, AP000476, AC004047, U66059, AC007243, AC007065, AL109628, AC004161, AL079334, AC000056, AC004451, AC005064, AC004823, Z77249, U72789, AL009028, AC003099, AC003658, AL034370, AC006979, L19910, AC006461, AL031665, AL035252, Z95124, AL080239, AC005201, AL031286, AL031652, AL121757, AC000119, AL133500, AL049838, AC006043, AL031671, AL078588, AL022157, Z82205, AC002524, AC007286, AC005273, AC007032, AC007533, AC007966, AL049834, AC006203, AC006356, U96409, AP000460, AC009308, AC016831, AC005352, AL049696, AC007159, AC006427, AC006840, Z70274, Z71182, Z82210, AC005588, AL023875, AL049734, AC007239, AL035563, AL121823, AC005873, AC006249, AC005034, AC002994, Z82215, AL022150, AL031114, Z69649, AF109076, AL009173, Z68280, AL031679, AC004613, AC005516, AC003037, AC006040, AL049874, AC004917, AL009173, Z68280, AL031679, AJ239329, AC005498, AC002040, AL136520, AC005050, AC005019, AC006952, AC005593, AC003676, AC002488, AP000547, AL035258, AL035688, AC003973, AC004384, AC004615, AL034410, AC005739, AL050334, AC005900, AC004617, AL022401, AL121871, AC006803, AB014078, AC006139, AC007007, AC004959, AC000055, AP000514, AL049634, AL096803, AB014078, AC006139, AC007007, AC004959, AC000055, AP000514, AL049634, AL031663, AL033521, AL049557, and AL109941. |
| HMSBZ69 | 3306 | 866997 | 1 - 757 | 15 - 771 | AA699358, R94584, and AF093097. |
| HMSCA33 | 3307 | 702821 | 1 - 413 | 15 - 427 | H16746, AI989391, AI651717, AI080151, AAS73388, AA927298, AA830295, AA805889, |

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| HMSCB10 | 3308 | 1 - 191 | 15 - 205 | Z41058, AI864771, and AA729846. |
| HMSCD14 | 3309 | 1 - 145 | 15 - 159 | |
| HMSCD15 | 3310 | 1 - 1223 | 15 - 1237 | AA828277, AI707568, AI333720, W33154, AI880870, AA848014, AA864599, N50622, AW087770, AW270419, AA761244, AA262754, AA779760, AI880826, AW407353, W37119, AA206843, Z42584, AA206842, and AB011126. |
| HMSCD45 | 3311 | 1 - 316 | 15 - 330 | |
| HMSCE07 | 3312 | 1 - 430 | 15 - 444 | AB017652. |
| HMSCE37 | 3313 | 1 - 344 | 15 - 358 | AW276877, AI310873, AA359994, AA074342, AI345366, AW190781, AA243530, AA346466, AW438765, AA811208, AI909706, AW082470, AW274078, AA837708, AA527602, AA599558, AL135262, N58329, AA804995, M77893, N71033, AA630854, AA527727, AA908331, N26617, AA372305, AA452325, N72307, AA630145, AA601630, AA654661, AI750865, AL134278, AA804466, AI628303, AI679540, AA427470, AI679978, AI675933, AI540851, AA468223, AI031277, AC007327, AF196972, AC003009, AI022313, AC006023, AI008725, AL031846, Z93244, AC006312, AP000513, AL022316, AC007546, AL139054, AC006537, AL133245, AL080243, AL022143, AL031120, AC004598, AC006344, AL034423, Z84486, AC005821, AC005154, AL022336, AC005668, AL023284, AC005546, AL009172, AC005619, AC000379, U95090, AC004821, U08988, AC004913, AP000500, AL109798, AL022476, AL035251, D86998, AC006130, AL020995, AC005042, AC007011, AP000553, AL031681, AC005539, AC009263, AL023575, AL049759, AL035494, AL035090, AC003077, AF165176, U95740, AF008191, Z73359, AC005971, U85195, AL031659, AC004185, AC006047, AC007707, AL023807, AC005179, AF045555, AE000658, AC005175, AC002044, AC007277, AC002312, AL031597, AC009247, AB023051, AC006571, AB023049, AC008101, AL117330, AL121825, AC002563, AL034400, AF139813, AC002288, AC004743, AC006505, AP000030, U91326, AL132708, AC005399, AC004858, AC004152, AC002544, AC021126, AP001053, AC010205, U66698, AB014540, AL022315, AC005081, AC005778, AL049757, Z95115, AC000094, AC005695, AC004560, AF106564, AC005777, AF109907, AC005968, AC005933, AP000509, Z99297, AC007192, AC002316, AL050350, AP000512, AC004234, AC006211, AL023803, AC004583, AC004526, AC001231, AC004885, Z95116, AC006466, AC004491, AC006450, AC005537, AC016025, AC004131, AP000295, AC004106, AC007845, AC002350, AL031985, AL109758, M89651, AF181449, AC005874, AF134471, AC005089, AP000501, Z99127, AC004933, AC007227, AL031290, AC002365, AL096701, AL035405, AC002996, AL034420, X87579, AC004662, AL050307, AP000098, AC005800, AC005379, AC007243, AL031273, AC005542, AL024498, D84394, and AC004659. |
| HMSCF41 | 3314 | 1 - 761 | 15 - 775 | AI523579. |
| HMSCF54 | 3315 | 1 - 354 | 15 - 368 | |
| HMSCF58 | 3316 | 1 - 73 | 15 - 87 | |

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| HMSCI26 | 3317 | 530239 | 1 - 651 | 15 - 665 | AP000334, and AP000173. |
| HMSCK06 | 3318 | 960601 | 1 - 376 | 15 - 390 | AI610751, AL096706, AC005256, AC005214, AC005145, AL133448, AC005354, AP000533, AC007435, AC005321, AL096774, AC002477, AC005682, AC002314, AL049843, AC002367, Z95152, and AL034369. |
| HMSCK17 | 3319 | 717703 | 1 - 484 | 15 - 498 | |
| HMSCK38 | 3320 | 967576 | 1 - 650 | 15 - 664 | Z82195, AF067787, AF067788, AC004257, and AC006511. |
| HMSCL01 | 3321 | 921754 | 1 - 352 | 15 - 366 | |
| HMSCM10 | 3322 | 926836 | 1 - 802 | 15 - 816 | AA527731, AI821508, AA532420, and N52655. |
| HMSCM95 | 3323 | 884019 | 1 - 295 | 15 - 309 | AC004765. |
| HMSCO18 | 3324 | 917009 | 1 - 439 | 15 - 453 | AL121748. |
| HMSCO39 | 3325 | 709592 | 1 - 284 | 15 - 298 | AP000496. |
| HMSCO60 | 3326 | 739685 | 1 - 384 | 15 - 398 | T92243, and AL033518. |
| HMSCO70 | 3327 | 879436 | 1 - 356 | 15 - 370 | AA018611, AA634223, T99365, AA613954, AI537407, Z98051, AL022320, AL022476, AC006241, AP000556, AC005089, AC000039, AL049694, AC007421, AC004887, AP000045, AC005015, AC004099, AP000557, AP000501, AF064861, AC005081, AC002310, AF047825, AC004841, AC007686, AC007124, AC005971, AC005412, AP000113, AC004854, AL031657, AC005082, AC005527, U91321, AL035422, AC004815, AL050324, AC007868, AI133353, AF134726, AC004263, AC007541, AL022322, AC003982, AC007707, AC005837, AF196969, AL109984, AL121603, AF088219, AF053356, AC005220, AC005702, Z83844, AF038458, AC009247, AC005529, AC005520, U78027, AC006505, AF030876, AE000658, AF031075, AC006130, AC003030, AC005914, AP000300, AL033525, AC003108, AJ229041, AL031846, AC004797, AC005666, AC005207, AP000502, AC006112, AL031273, and AC005409. |
| HMSCR39 | 3328 | 601504 | 1 - 593 | 15 - 607 | AL138265, AL040921, AL038705, AI872227, AI149478, AW406447, AL046205, AL042853, AA515829, AI801482, AW327868, AI281881, AI334443, AW029038, AW270270, AI924251, AL045053, AA610491, AI133164, AL045526, AI963720, AA210852, AI679782, AL046409, AA469451, AW162049, AW406755, F36273, AI929531, AI120687, AI811687, AI345675, AI358229, AI284640, AI683577, AW276817, AW193265, AW088202, AI044858, AW021583, AI431303, AI904894, C06327, AI962050, AI148277, AW088224, AA526787, AI049722, AA581903, AI339850, AL038785, AI708009, AI350211, C05755, AI608771, AI365988, AA649642, AW088058, AI613280, AW162489, AA587604, AI471534, AA178953, AI345681, AA192740, AI471543, AA468131, AI053672, AW438643, AW338086, AI287651, F29989, AI192631, AI341664, AI053790, AA134367, AI281903, AI254615, AI289067, AI918421, AI061334, AA661948, AI917271, AA613227, AA577906, AI119691, AI619997, AI307201, AI471481, AA521323, AI305547, AA601355, AI457397, AW238583, AI688846, AW440836, AA523810, AI270117, AA826303, AI345654, AA652057, C75026, AI745325, AI744995, AW072587, AL038474, AI198376, AW439558, AA501784, AI754658, AI358571, AI053606, AI298710, AA533725, AI589230, AA631507, AI279165, AI005388, AW265009, AI623720, |

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| HMSCR82 | 3329 | 806176 | 1 - 251 | 15 - 265 | AW193432, AA127916, AI375710, AA679124, AL042420, AA483771, AI821714, AI792133, AI791913, F32808, AA521399, AA720702, AW339687, AI085719, AW062724, AA594145, AI160117, AA177061, AA523815, AC005694, AC008372, AC005529, AC006254, AC005527, AC006120, AC005932, AC005274, AC006141, AL020995, AC004477, AC007221, Z83826, AC005280, Z95704, AC007664, AC007666, AL031311, AC006285, AC005288, AC012627, AC005722, AC002470, AL096701, AC005488, U47924, AL031662, AL121603, AP000356, AL050306, AL078593, AC005409, AC000052, AC004531, D84394, AL121754, U85195, Z94721, AL034549, AC005821, AC006511, AL136295, AC006312, AC006077, AC007686, AE000658, U15177, AL049795, AL109628, AL035079, AC006960, AC004854, Z83840, AC005914, AC005566, AL049776, AP000359, Z93930, AC004832, AC007541, AC004796, AC005212, AC009247, AC004878, AC004797, AP000961, AL008629, AC005089, U91322, AC007226, AJ246003, AL050312, AC002350, AL021394, AC004848, AP000302, AI022237, AC005915, AL049569, AL008582, AL033525, AL021877, AL109801, AL022311, AC005772, AF030876, AJ006998, AC006064, AC005829, AL122020, AL133448, AC004841, AP000513, AL031848, AC006116, Z98036, AF111168, AC005874, AF134471, AC004821, AD000092, AC002430, AC007546, AC005695, AL133246, AL139054, AL121653, AF020803, AL023284, AI035420, AF088219, AC006101, AC004263, AL034429, AL109627, U95742, AF031078, AC006450, AC005913, AC007917, AL049780, AC007384, AC007536, AC005081, AC004999, AC005696, AC002400, AL031284, AC009516, AL022721, AC003664, AC005553, AL049745, AC004887, AP000504, Z98051, AC005180, AP000114, AP000046, AL034423, AL022163, AF129756, AC006111, AL109758, AL049743, AC007064, AC007055, AC007193, AP000555, AC005520, AP000552, AC005666, AL021707, AC005703, AC006449, Z97632, AC005037, AC006026, AC007919, AL021939, AL096791, AC004605, AC005519, AP000558, AC004526, AC006480, AL022323, AC003689, AC004019, AC004972, AB001523, AC005839, AC005902, AP000952, AP000045, AF165926, AC005231, AC000025, AC005899, AC006012, AC004139, AF001549, Z97054, AC020663, AF053356, AC002347, AC004771, AL050331, AC005911, Z98200, AC007051, AL034417, AL008718, Z93241, AC005516, AC007388, AF196779, AC006441, AL021453, AC002395, AC005331, AC007845, AC005291, AP001172, AC005256, AP000553, AL110502, AC005295, AC005663, AC007688, AC003690, AC006130, AC007052, AJ003147, AL022326, AC007559, Z98950, AC005632, AL133245, AL031283, Z75741, AC004814, AC005372, AC016026, AL031005, AC003043, U66059, AC005562, AC007216, AL031295, AC007731, Z85986, AC003029, AL031286, AP000115, AL121934, AC005701, AC006251, AC007242, AC005971, AC005500, AC005257, Z74739, AL031577, AC005084, AC005901, AC004970, U95090, AL049636, and AC005065. |
| HMSCU35 | 3330 | 725513 | 1 - 676 | 15 - 690 | AA179771, AA740885, AL042323, and AI017333. |
| HMSCY29 | 3331 | 703105 | 1 - 345 | 15 - 359 | AI792820, and AI792471. |

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| HMSCY91 | 3332 | 789306 | 1-420 | 15-434 | |
| HMSCZ51 | 3333 | 724839 | 1-187 | 15-201 | AI052366. |
| HMSDA03 | 3334 | 881563 | 1-508 | 15-522 | |
| HMSDB74 | 3335 | 765933 | 1-327 | 15-341 | |
| HMSDD80 | 3336 | 503967 | 1-910 | 15-924 | N39672, R92235, AI248707, AA682815, AL119721, T91429, T91341, M85784, AA505009, AL045445, W90432, N30473, D79995, AC004495, and AC007151. |
| HMSDF01 | 3337 | 921672 | 1-303 | 15-317 | |
| HMSDG77 | 3338 | 708078 | 1-340 | 15-354 | AC004841, and AL031255. |
| HMSDK32 | 3339 | 416928 | 1-252 | 15-266 | |
| HMSDM29 | 3340 | 703075 | 1-176 | 15-190 | Z93784. |
| HMSDP23 | 3341 | 583670 | 1-485 | 15-499 | H59931, H67432, AC005154, AC009784, AC003100, AC003034, AL022154, Z70280, AC003072, and AC006998. |
| HMSDQ33 | 3342 | 702772 | 1-368 | 15-382 | T41354, AC006123, and AC003107. |
| HMSDR06 | 3343 | 954682 | 1-272 | 15-286 | AL020995. |
| HMSDR55 | 3344 | 732443 | 1-335 | 15-349 | |
| HMSDU43 | 3345 | 868183 | 1-303 | 15-317 | AI243681, AA620742, AA906977, AA610037, and T04923. |
| HMSDU73 | 3346 | 753010 | 1-136 | 15-150 | AF053755, and AF047033. |
| HMSDV49 | 3347 | 722194 | 1-343 | 15-357 | |
| HMSEG37 | 3348 | 708656 | 1-202 | 15-216 | Z41951, and AW295173. |
| HMSEM59 | 3349 | 708076 | 1-63 | 15-77 | |
| HMSEM80 | 3350 | 718087 | 1-305 | 15-319 | |
| HMSEO23 | 3351 | 676369 | 1-394 | 15-408 | |
| HMSEU01 | 3352 | 921628 | 1-365 | 15-379 | |
| HMSFH05 | 3353 | 932219 | 1-414 | 15-428 | |
| HMSFH21 | 3354 | 671133 | 1-333 | 15-347 | AL078463. |
| HMSFH24 | 3355 | 855826 | 1-259 | 15-273 | |
| HMSFH27 | 3356 | 682204 | 1-339 | 15-353 | AA180174, AA283603, AA304829, AA233827, and AF115509. |
| HMSFH29 | 3357 | 689857 | 1-229 | 15-243 | |
| HMSFH31 | 3358 | 583757 | 1-866 | 15-880 | AI174683, AI174796, N58549, AI523111, AA585278, AA585439, AA585430, AA585389, AA585378, AI526112, AA585325, AA585329, AA283312, AA585453, AA585116, AI525306, AA585327, T26367, T48593, AW366296, AA585351, AI557238, AI525656, AL122127, Z49918, AL109759, AC003084, AC006975, AL035467, AP000432, AF118808, AC002368, AL049545, AL132994, AC004756, Z98200, AL136363, AL132708, and AL133233. |
| HMSFH34 | 3359 | 706349 | 1-319 | 15-333 | |
| HMSFH39 | 3360 | 705586 | 1-344 | 15-358 | AA131265. |
| HMSFH59 | 3361 | 739415 | 1-355 | 15-369 | |

| HMSFH73 | 3362 | 764554 | 1 - 187 | 15 - 201 | |
| HMSFH79 | 3363 | 775318 | 1 - 206 | 15 - 220 | |
| HMSFH83 | 3364 | 780301 | 1 - 520 | 15 - 534 | |
| HMSFK32 | 3365 | 671136 | 1 - 227 | 15 - 241 | |
| HMSFL10 | 3366 | 968061 | 1 - 331 | 15 - 345 | AC008062. |
| HMSFL41 | 3367 | 934139 | 1 - 485 | 15 - 499 | Z45369, and AC004752. |
| HMSFL49 | 3368 | 683406 | 1 - 287 | 15 - 301 | |
| HMSFN48 | 3369 | 697991 | 1 - 473 | 15 - 487 | |
| HMSFQ48 | 3370 | 721795 | 1 - 596 | 15 - 610 | AW083053, AI457313, AI634187, AW069227, AA365893, AA303054, AI744830, AI753365, H68343, AI301475, AI926233, AI275183, R89081, AA747234, AA018231, AA904211, AC006449, AE000658, AC004854, Z83840, AC007227, AC005874, AF134471, AC005046, AC007666, AC005837, AL022312, AL022328, AC005089, AC005071, AC005377, AB023049, AC006011, AL049779, AC004232, AL024498, AC004593, AC004216, Z84469, U96629, AC006057, Z83822, AC005962, AC004859, AR036572, U91328, AL050307, AC006965, AC004876, AC007388, AL022476, AL121653, AL031594, AC007226, AL078477, AL031311, AC005363, AL031589, AC005777, AC004893, AC003108, Z82215, AL023799, AC006285, AL031056, AC007537, AL034420, AC005921, AC005696, AC002400, AC004821, AL024507, AC005231, AP000692, AC005015, AC003982, AL117354, AL034402, Z74739, AC004000, Z93023, AC003957, AC010197, AL049830, AC007637, AL031295, AC005529, AC004858, AC006160, AL033527, AC002527, Z85986, AL031985, AC006039, AC005081, AL096701, AC004099, AP000252, AC002527, Z85986, AC005726, AC002126, Z95116, AL031427, Z83838, AL049759, AC005746, AC008044, AC005726, AC002126, Z95116, AL031427, Z83838, AL049759, AC002542, AC004019, Z85987, AL050318, AC002115, AP000501, AP000359, AP000212, AP000134, AC005037, AC002369, AL009181, Z99943, AL035405, AC000052, AC005383, AB023048, AC000039, Z98051, AC003010, L78833, AC004832, AL034376, AF001552, AC005399, AL009172, AL109952, U85195, AC005722, AL035587, AF111167, AC004491, AC004799, AC005740, AC005412, AC004148, Z84466, AL034429, AL049569, AC005914, AL096774, AL022313, AC007216, AL109798, AC006515, AL078638, Z97630, AC005933, AC005048, AC002549, AC006088, AF038458, AL031662, AL049776, AP001053, AP000088, AF024533, Z83826, AC005215, Z98752, Z83845, AF030453, Z82202, AC004032, AC000105, AL022336, AL031670, AP000553, AL023575, AL035410, AC004852, AL121769, AP000113, AC006480, Z93783, AC007011, AL023575, AC005568, AC005520, Z92542, AC002997, AC004975, AC004531, AL080243, AC016831, AC006946, L78810, AL031595, AC005067, AL109758, AC005225, AF064861, and AC004106. |
| HMSFQ69 | 3371 | 657538 | 1 - 445 | 15 - 459 | AW026161. |
| HMSFR29 | 3372 | 693440 | 1 - 151 | 15 - 165 | AA552587, AC006296, and AC005841. |
| HMSFR69 | 3373 | 738588 | 1 - 255 | 15 - 269 | AW081383, AI799195, AI680498, AI345677, AI358213, AI866770, AI357599, AI249946, |

AI573026, AI816947, AI636445, AI283143, AI677646, AI798385, AW189415, AI350880, AI446373, AW007597, AW193872, AW089006, AI628833, AI799540, AW105620, AI636619, AW268261, AI636811, AW117919, AI682652, AI281867, AI866082, AI470293, AI539771, AW058233, AI269696, AW090387, AI249877, AI590423, AI830026, AA848053, AW157301, AI446704, AW085673, AI869869, AI290153, AI361291, AA502794, AI913452, AI620093, R40432, AI539687, AI621362, AI242931, AI370037, AW169462, AI284131, AI242251, AI247082, AW005612, AI280607, AW084097, AI096534, AI625516, AI925404, AI886594, AI554425, AW169368, AI434242, AI684129, AI953765, AI537643, AI873638, AI445976, AI679672, AI921479, AW189148, AI357075, AI446092, AW151926, AI888621, AI659795, AI655841, AI690536, AW079334, AI620714, AI805769, AI499191, AI874151, AI560545, AW075613, AW191844, AI829377, AI589428, AI687065, AI161278, AW103200, AI648408, AW085947, AW006270, AI539781, AI571699, AI539707, AI540606, AI345253, AI559752, AA088789, AI431909, AW082600, AI824497, AI612750, AI536738, AI818320, AI274655, AI583032, AA916372, AI929564, AI802372, AW073898, AI471282, AI640799, AW082532, AI499986, AI805688, AW169001, AI961310, AI890907, AI861972, AI860817, AI538764, AW149876, AW148685, AW409821, AI612885, AW150326, AW168373, AI251221, AW265004, AI538850, AI818578, AA738052, AW189933, AI589273, AI471227, AI690813, AI924686, AW169848, AI251458, AI453328, AW085639, AI687568, AI468959, AW081255, AI885989, AL036772, AL036396, AI683634, AI566724, AW129230, AW129731, AI678284, AI918500, AW190266, AI250871, AW079315, AA878843, AA070889, AI553645, AI349933, AI972155, AW169624, AI270039, AI560679, AI469738, AI493576, AI081740, AI345608, AW081234, AW196075, AI240602, AW008090, AI591407, AI285586, AW071177, AI636268, AW088223, AI283760, AI954504, AW168031, AI371886, AW087270, AA243996, AI439962, AA575874, AI471898, AI682958, AI929108, AI866608, AW132034, AI590686, AI521244, AI473451, AI571868, AI310606, AI690585, AI933992, AI687482, AI537677, AI673785, AI701882, AW083783, AI701975, AA806719, AI922577, AI345471, AI828795, AW129689, AW027904, AI932988, AI567540, AW190286, AI419440, AI679098, AI570966, AW166182, AI861976, AW087385, AI887308, AI631216, AW168823, AI261589, AI804965, AL046463, AI826331, AA012905, AW163834, AW167229, AI587606, AI656412, AI801404, AI524607, AI611743, AI583578, N98606, AW083804, AW168503, AA830821, AI432229, AI097245, AI951222, AI696626, AI589993, AC006141, X99257, AI8777, S77771, AL117629, AR068182, I48978, A08913, A08912, A08910, A08911, A08909, AL080140, A08907, A08908, E15582, S76508, X84990, AL050138, I89947, I89931, I49625, AF085809, AF036941, X87582, AR038854, E02349, AF192557, I89934, AL080110, A45787, Y11587, A08916, AC007298, AC002382, AL080127, AF030513, D16301, U77594, AF182215, S78214, S75997, I42402, AF159615, AL133557, X57084, U75370, A18788, AL137292, AF098162, D55641, A21103, X55446, AL137665, L13297, AF113691, L40363, AF067420, AF151109, AL117585, AF081197, AF081195, AF110520,

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| HMSFR71 | 3374 | 760517 | 1 - 199 | 15 - 213 | AF111112, AF067790, AF119337, AF012536, A65340, I89944, E05822, AF215669, AL049460, AL122106, AF143957, AL137574, X59414, AL080137, AL137705, AL133619, AC006371, AL137300, L19437, AF067728, AF065135, AF132676, AL080154, AF162782, AF061836, AL122111, AF000301, AL133075, U78525, D83989, I41145, AF162270, AF028823, A76337, AL080162, AF199027, U49434, A21101, A23630, A58524, A58523, Y08769, AR000496, U39656, AF000145, M92439, U49908, A17115, A18079, AC004686, AR068753, AL137556, U92068, AR019470, AF115392, AF061795, AF151685, AL133016, AL137495, X72387, I48979, AC004987, X81464, X63410, AL080060, E03348, A57389, S78453, AL049464, AF113689, AL137526, X66862, AL080159, E03349, AL049382, AF030165, AL117626, U58996, L30117, AR038969, AL137538, AR059958, AF109155, U42031, U96683, AL050149, AL137712, X54971, AF205861, AL137558, AL117440, AL137547, AF061981, S68736, AF180525, AL137273, AR054987, AF104032, X99226, AL050366, X53587, E08263, E08264, AF113013, AL035407, AC005992, AL110159, A08915, AL117648, AR068751, AL137429, Y16258, AF114170, AL122049, Y16257, E02756, Y16256, A86558, X56039, I09360, AL133093, U57715, AB025103, AB007812, AF017152, AL110221, AL133062, AL137256, I66342, AL133077, AL137660, AF081571, A51774, AL137527, AL137294, AL050393, AL137555, E02221, E01614, E13364, X62773, AL122121, A93016, A15345, Y11254, AF089818, A76335, AC007390, I92592, I29004, E12579, E12580, Y10823, AL050277, AF113699, AL137560, AF107847, AF183393, A27171, AL117394, AL110224, AL137476, AL133665, AC002467, AF106945, I22272, AL080124, AL137463, AF013214, X98066, AF113019, AL133067, AL049339, AL049938, A65341, E04233, AL137478, X62580, I33392, AL133640, X80340, AL137271, Z82022, and AL137554. |
| HMSFR92 | 3375 | 861344 | 1 - 567 | 15 - 581 | AL035427. |
| HMSFS59 | 3376 | 739420 | 1 - 422 | 15 - 436 | AC006157. |
| HMSFS69 | 3377 | 757687 | 1 - 336 | 15 - 350 | T47867, R76479, T49436, F06560, AA715949, AI927261, AI453160, AI564294, AA668475, AA632765, AW081324, AI471467, AW007424, AI819391, AI823533, AI823535, H40478, AA226770, AA515551, R99418, AA748102, AI356264, AW028834, AA017174, AA019068, AI891075, AW058223, W04439, AA046440, AA854460, W56799, AI289916, AA467774, R67093, AA702717, AA719523, R45580, AI801505, AA749029, AA469441, R35259, AL041895, AL040717, AL049274, AC004466, AC005200, Z82215, AC005880, AL109984, M15366, AL020996, AC004520, AC004967, Z97635, M30688, AL022337, AL022156, AC005190, X54486, AC000402, AC004653, AC002102, AC005353, AC004100, AC008116, AC000003, AC006965, AC005552, AC006305, AC006333, AC002366, AC006979, AC016027, AC016830, AC005256, AC004955, AC002059, AC004491, M13792, AC005483, AC002378, AL031114, AL031281, AC005225, Z84485, AC002472, AL049779, AC007226, AC006141, AC002554, Z68884, Z99754, Z70281, AC004652, AC004678, AC003048, AC004202, AC003048, AC005360, AC005796, AC000091, |

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| HMSFT23 | 3378 | 855812 | 1-399 | 15-413 | AL034582, AF002994, AP000300, AC002094, AI023694, Z98046, AI008712, AC008078, Y07848, AL132799, AC003688, AC005773, AP000068, AP000113, AP000045, AL031622, AC004736, AC005153, AC000026, AL050350, AC007279, AL050318, AL109753, AC003071, AC007189, AP000356, Z82189, AC005409, AF123462, AC005040, AC005531, AL031009, AL117391, AC002390, AF190641, AP000091, AL122021, AC005215, AC004408, AC004883, AF107257, AC005684, AP000236, AL031313, AL049709, AC007051, AC007240, AL096770, AC005046, AC005081, AC002470, AC005620, and AF017104. |
| HMSFT52 | 3379 | 727302 | 1-489 | 15-503 | R07137, AI761762, AB028943, AP000556, and AP000557. |
| HMSFT73 | 3380 | 761647 | 1-323 | 15-337 | AL022165. |
| HMSFW13 | 3381 | 917020 | 1-309 | 15-323 | H53374, and R99274. |
| HMSFX01 | 3382 | 917021 | 1-496 | 15-510 | AA486810, R46108, R37254, R41969, R42367, H12053, AL044613, H16581, AA737346, AA223170, AA342459, H05040, AI923052, AI961688, AA676473, AA665525, AA653300, AA737106, AI279048, AL120481, AA551181, F04207, AA715850, AA485699, F10966, AI191391, H98096, AI243847, H66037, AA345064, AW088581, AA370455, AI754293, AW247392, AA827231, AA651833, H12383, H51061, AI267269, AA991914, AA701080, F04926, AA773740, N74747, AA618080, H71863, AA055784, AL031595, AL117440, AB016194, AL009172, AC007971, AF129756, AC006539, Z98051, AC005531, AL109628, AC005229, AL121655, AC006059, AP000140, AL049589, AP000088, AC006536, AL022476, AC005102, AC006238, AL035695, D87675, AC006530, AC006211, AC007686, AB020864, AC007684, AP000257, AC005520, AC005899, Z69722, AL022238, AC016027, AC000379, AC004859, AC016830, AC002312, AC005730, AF205588, AC002991, AC003963, AC007226, AF111169, AC005488, AF196969, AL022323, AP000098, AL035659, AF059675, AC003098, AC007386, AC002425, AC004408, AC002430, AC004381, AC007384, AP000111, AP000043, AC000085, AL049545, AC006449, AC006011, AF111168, AC005037, Z83838, AC005988, AL049545, AC006023, AC004000, AC006213, U29895, AL096701, AC002303, U95742, AC004996, Z74617, AC006023, AC004024, AC005527, AC007114, AC004590, AL035106, AC005074, AC004797, AJ011930, AC004024, AC005527, AC006487, AL034555, AF001550, AC005846, AL034419, AP000459, AC004815, AF165926, AC006487, AL034555, AF001550, AC005940, AC002128, AC007024, AC000070, AL109865, AP000354, AC009178, AL117258, AC004991, AL049632, AF134726, Z93017, AC006014, AC005399, AC007308, Z94801, AC004991, AL049632, AF134726, AC006478, AC004778, AL080241, AC000159, AL049646, AC007546, AC006120, AC005529, Z83845, Z85986, AC005391, AC007406, Z82194, AC007227, AC005746, L78810, AC002350, AL022237, AL021366, AL049795, AC004787, AF059650, U91318, AL023575, AC000073, AC007199, AC005544, AC005082, AL009031, AC005409, AC002326, AL035079, Z94161, AL031295, AC006323, AC004813, and Z94721. |
| HMSFX08 | 3383 | 959784 | 1-290 | 15-304 | |

1924

| HMSFY49 | 3384 | 574906 | 1 - 386 | 15 - 400 |
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| | | | | N71579, AA878407, AL039309, AI270120, T08386, AA654482, AA501867, AI671077, AW078821, AA720750, AI358712, H43183, AA678616, AW243945, AW390284, AA644223, AI283938, AI347665, AA581498, AA092704, AI620992, AA584207, AI472736, AI914713, H77956, AW440568, N67313, AA678932, AW0R1610, W63553, AA364420, AW008184, AA565319, AA126814, AI929796, AI889995, AI291419, AI797998, F08866, AA320105, AW019964, AI859744, AI926741, AW270429, H67064, AA401921, H60313, AI571866, AI923360, AI478695, AW162750, AA86257, AA862312, AW270351, AW381823, AA135988, AI224415, AA304858, AA297789, AA086257, AA610433, AW419389, AA947369, AA715508, C15504, AA056248, AA904211, AA599532, AA371410, AI254770, AI284543, AI686431, AI054090, AI366180, AA228778, AI246061, AI816058, D51877, AA598605, AA662614, AI924207, AL042230, AI636734, AW264901, AA831638, AI799421, AW069227, AA714073, AA078754, T93109, T92803, C14627, H52472, C14330, AW089950, AA609826, AA568314, H47736, AI634187, AA599080, AI279417, AI358776, AW338651, AI457313, C14796, AI251944, F25099, AA486277, AW068580, AA664887, AW249541, AI249853, AI251241, AA832016, AI567391, AA077619, AA831801, AI362442, AA984829, AI251034, AI251203, AA862029, AA410788, AA324088, AL042735, AI251284, AA857812, AI570805, AI049955, AA601460, AA309362, AA662989, AA302978, T69879, AI912401, AW265149, AA565911, AW337805, AA780933, AW275432, AA434078, AA846923, AA382173, H48768, N54538, AA078509, AA384911, AA279919, AI619994, AA665304, AA122307, AI250552, AI417469, H15241, AA078088, C14966, AI302156, AA381762, AA343894, AI889579, AA728861, AL121658, AF134726, AL035086, Z56114, AP000502, AL096816, AB014077, AC004209, Z83822, AL021391, U47924, AC005225, AC004882, AC005881, AJ003147, AC005529, AC006064, AC007773, AC003667, L10641, AC007076, AC004019, AC004595, AC007057, AL049872, Z83851, AL022396, AC004560, AC005875, AP000501, AL022315, AL035587, AC004819, D87675, AC006449, AC006057, AC005833, Z82189, Z84813, AC004858, Z73988, AL050347, AL080250, M87889, Z83843, AC004821, U52112, AC005015, AC004905, AP000350, AF002223, AF116548, AJ246003, AL136504, AC006251, AC005328, AC005291, AP000321, Z83856, AP000121, AC005049, AC000111, AC006270, AL009181, AC005291, AP000321, Z83856, AP000121, AC005049, AC000111, AF109907, AC005088, AC004799, AC003030, AL022320, AC006965, AC002400, I34294, AC006966, AL035683, Z82195, AC004126, U52111, AC007226, AC003108, AC005722, AC007263, AC004453, AC006600, AC002477, AC007055, AP000503, AC005585, AC004832, AP000553, AF029308, U51561, AP000504, AP000008, AL021155, AP000704, Z83838, AF129756, AF116546, AC006040, AL049569, AC007269, AC004491, AL031123, AF027390, AP000402, AL021578, D88268, AC004611, Z98256, AP000065, AL035460, AC002430, AC007384, AL117694, AC007676, AC005072, AL049636, AC007663, AC004685, AL133448, AC006160, Z85986, AC004132, AP001051, AC005257, AP000301, AC005197, AC004526, AC006261, Z75407, AL118516, AC003077, AF030453, AC002418, AC002418, AC007934, AC004386, |

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| HMSFY70 | 3385 | 757338 | 1 - 336 | 15 - 350 | AC005906, AC007363, S42653, AC005512, AC007395, AC005089, Z95331, 794801, L44140, AC006501, X51956, AC007201, AP000337, AL008632, AL021453, AC003959, AL121838, AP000216, AL023656, AL022326, AC005244, AC006512, AL121790, AC005666, AL049776, AF067844, AC006952, AP000352, AP000167, AP000052, AL133879, AL121790, AC005796, AL031670, AP000300, AC004890, AC007686, AF024534, AF196779, AC005041, AC002472, AC007664, AC008018, AC006111, AL050317, AC007298, AD000091, AC002054, AC002472, AL132766, Z95115, AF064861, AI022069, AC005042, D00591, AL021977, D85429, AC002072, AL132766, Z95115, AF064861, AL022069, AC005042, D00591, AL021977, AL031282, AE000658, AC007216, AL031730, AC007637, AL022165, AB012922, Z54147, D42052, Z84496, AL035462, AL096761, Z93244, AL035530, Z84466, AC005378, AC004883, AL078638, AC004770, Z73359, AC007388, AP000045, AP000113, AC004706, AC002301, AC006962, Z82244, AL049575, AL049699, AC006236, Z83850, AL132642, AC007684, AC005913, AC008044, L35533, X69907, AF196969, AC006993, Z82176, AC005390, AC005366, AL096772, U95740, AC000097, AC006549, AC006547, AC005516, AL133355, and Z84469. |
| HMSFZ04 | 3386 | 615473 | 1 - 201 | 15 - 215 | |
| HMSGA34 | 3387 | 706355 | 1 - 209 | 15 - 223 | AA623002, H48636, AA774184, AA678499, AA158301, H86860, W85752, AA653964, T53128, AA630925, AA601355, AI046457, AA483223, R84309, W16581, R92288, R84303, AL079935, R84296, R67365, AA602528, W80462, AA584749, AI305766, AA568778, H02477, H86097, AA577906, AI613280, N70442, AW193432, AI002796, AA342914, AA643456, AA858197, AA64538, AA059472, AA678436, AI469172, AA136122, AA053551, AA810370, AA524838, AA906889, AI284640, AI270343, AA829405, AA824654, AA641989, AA824655, AL110444, M78177, N23653, H11124, H64778, F23279, AA490183, AA626678, T10560, AA533450, AA513972, AI865364, AA365347, AI610159, AA834755, H02877, AW074398, AA167643, AA633094, R83443, AI758582, AA834297, AA664535, F31204, AA280632, AI824562, AA664015, AA357937, AA743956, AA828856, AI133723, AA574110, AI688846, AA437161, AA158328, AW261871, AI270117, F18974, AI049634, F25203, AW193265, AA515128, AA723017, AI350211, AI923140, AI567786, T48649, AI061334, AI246409, AI282907, F36273, AI889781, AI431303, AI608674, AA457639, AI471481, AA581342, AI814735, AA745410, H49061, Z98473, AW276827, AI375710, Z82214, AL078640, AL035495, AL024507, AC004931, AC000396, AC005250, AC006211, Z92844, AC004237, AC007227, AL109985, AL096701, AC006327, AP000115, AC003686, AL078621, AC007541, AC004227, AC004833, AL031848, AC009223, Z81369, AL079295, AL008629, AC004761, AP000556, AP000557, AL034423, AL117258, AC005696, AC005412, AC004685, AC005703, AC008038, AC007751, AF117829, AC004895, AC007528, AL008723, AP000477, AL031650, AL096861, AL035681, AC006960, AL121603, AL008583, AC007731, AC005500, AC009891, AC007437, AC004690, AC007632, AL049550, AP000402, AL096770, AL031178, AC007450, AC006538, AC002531, Z85987, AL035467, AC000066, AC003695, X60152, AC006196, Z97206, AL023803, AC004070, Z84467, |

| | | | | | Accession numbers |
|---|---|---|---|---|---|
| HMSGA41 | 3388 | 712490 | 1 - 530 | 15 - 544 | AL035417, AL031577, AL096769, AL050308, AC002422, AL078604, AC005879, AC007225, AC004041, AP000431, AR036572, U91328, AL022318, AC002347, AJ010770, AC007684, AC005358, AJ246003, AP000548, Z97352, AP000302, AP001059, AC004771, AP000114, AP000046, AL031295, AL049557, U91322, AC004104, AC007536, L43392, AC007687, AC005912, AL022721, AC005084, AL109627, AC005043, AC006006, Z59666, AC008173, AC005041, AL033525, AF152365, AC005274, AC008249, AC004583, AC004814, AC005377, AC004960, AC002542, AL121658, AC005837, AC007277, Z98043, AL031588, AC005295, AC007245, AC005191, AC000100, AC002395, AL031591, AC006925, AP000350, Z97987, AL033521, AC002509, I17291, X83604, AC008040, AC004019, AF001550, AL021918, L13709, L13713, AL031732, I.13714, X62025, AC006353, AC002041, AC007686, AC004381, AL031447, AC006195, AL135879, AL121790, U91321, AC004386, AC007564, AC002091, AC005971, AFI09907, Z99716, AL031407, AC005755, AC003119, AC021092, AI.049761, AC009516, AL031053, Z98051, AC007447, AC006026, Z83313, AC004745, AB020866, AC007666, AC000052, AF130248, AC000004, AC006468, AI.020995, Z82900, AC004152, AL135744, AJ006996, and AP001172. |
| HMSGB07 | 3389 | 953715 | 1 - 332 | 15 - 346 | |
| HMSGC69 | 3390 | 757337 | 1 - 340 | 15 - 354 | AA455432, and AA455959. |
| HMSGC76 | 3391 | 767661 | 1 - 345 | 15 - 359 | AA983767. |
| HMSGD02 | 3392 | 920525 | 1 - 430 | 15 - 444 | |
| HMSGD15 | 3393 | 959468 | 1 - 409 | 15 - 423 | AI889995, AA469230, AI587583, AI587565, AI609992, H62123, AI791659, AI609984, AW410409, AW022796, AA857296, AA468923, AI610012, AI866911, AA935827, AI609974, AI003086, AI821605, AI345566, AA480486, AL041375, AI224583, AI590404, AA135761, AW238341, AI733523, AI453155, AI547110, AW020150, AI521525, AI065031, AA507814, AA676592, AA831714, AW341903, AA425283, AI857834, AI560866, Z99348, AA218684, AA182928, AA720582, AI254267, AA557945, AA804726, AI123488, N94115, AW169038, AI890297, AW338376, AW404543, AA171400, F23338, AA226356, AI095197, AA595661, AL134278, AA679946, AW020094, AW302320, AL042667, AL042670, AA584489, AW149241, AI040051, AA084320, AW008217, AI926102, AL120282, AW021399, AI567676, AA601376, AI679730, AL044339, AI044701, AI800426, AA526542, AA554289, AA324559, AW157128, AA324108, AA197089, AI282488, AI572680, AA493546, AI053518, AW072963, AC004678, Z82215, AL035422, Z95115, AA676462, AI754653, AA551519, AI023575, AC004812, AL049569, AC004685, AL021808, AL031291, AC005154, AA618531, Z95114, AL034549, AL035249, AC007207, AC007685, Z84469, AC005255, AL109627, AC006449, U78027, AL034549, AI733523, AC002326, AL121603, AC005484, Z84469, AC005399, AC005081, AP000692, AF047825, AC002326, AL121603, U91323, AC008372, AC008044, AC005013, AP000108, AP000065, AC003108, AP000048, AL009031, AL022318, U91323, AC008372, AC008044, AC005841, AC005013, AP000108, AP000065, AC003108, AP000048, AL031311, AC004972, AL022721, AC022721, AC005841, |

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| HMSGH49 | 3394 | 712123 | 1 - 530 | 15 - 544 | AL022316, AL135960, AJ131016, AC007041, AL096791, AC007226, AL031300, AC000095, AC006487, AC009464, AC003006, AL139054, AL034548, AL031735, AC004263, AL022302, AL109963, AC005971, AC006285, U91321, AC007371, Z93244, AC002477, AC007731, AC005500, AC007136, AC003043, AC006064, AF001548, AC004491, AC010205, AL122020, AC006241, AC006312, AC016025, AC006213, Z99128, AC005231, Z98051, AF111168, Y10196, AL096701, AL080243, AC006121, AC007546, Z93023, AC005356, Z95116, U47924, AL034379, AL049775, AP000512, AC020663, AL121754, AL034420, AC009288, AC000120, AC006211, AL049758, AF149773, AC004605, AP000152, AL022311, AD000092, AP000359, AC005288, AC004000, AC003035, L44140, AC005702, AC005921, AL022147, AC004148, AL031277, AF196971, AC005082, AL050348, AF196972, AC003110, AC007707, AC004167, L78833, AC005037, AC004887, Z83840, AC002357, AC007242, AC003962, AP000557, AC005516, AC004408, AC004797, AC004967, AC005755, AC007114, AP000049, AL121825, AC007421, AC005330, AL049872, AP000513, AF200465, AC002480, AL132712, AL021391, AL049874, AC005274, Z96074, AL034417, AC006571, AF053356, AC004686, AL049843, AF134726, AC002045, AB023049, AL121756, AC005612, AC005534, AP000311, AC011311, AC004922, AP000011, AC004447, AI049540, AC007934, AC008126, AC002310, AC005089, AC007055, AL049869, M89651, AC006486, AC005046, AC007283, AL031685, L47234, AL049631, Y14768, AP000501, AC005808, AL121655, AC006011, AC008018, AC006146, AF207550, AC004895, AC004383, AC007637, AC002038, AC005529, AB000882, AC003098, AL133312, AP000688, AC003101, AC005071, AC000064, AC007308, AF001552, AC005911, AC004149, AL035659, AL121658, U52112, AC002425, AL109952, AL031282, AF064859, U90094, AC005250, AL031848, AC004662, U91322, AC006084, AL049743, U73167, AC002094, AC007537, AL035443, AL131295, AC005291, D88268, AC005372, AP000130, AP000208, AL132642, AL049631, AC006536, Z83838, AC005527, AC005899, AL031432, AL136295, AL034423, AP000247, AC007664, AL009181, AC006160, AC004099, AC005247, AC000026, and AC002394. |
| HMSGI42 | 3395 | 712994 | 1 - 340 | 15 - 354 | |
| HMSGK16 | 3396 | 861329 | 1 - 793 | 15 - 807 | T83331. |
| HMSGK82 | 3397 | 778875 | 1 - 279 | 15 - 293 | |
| HMSGL27 | 3398 | 638097 | 1 - 1599 | 15 - 1613 | AA287567, AA252404, AW249468, AA547979, AA601218, AA287570, AA569648, AA255853, AI986165, C18751, AA505108, AA126763, AI732430, AI732458, AA127499, AA984187, AA814400, AI917132, AA714224, AA758277, AA085372, AI380617, AI669421, AA714110, AI040051, AL041894, AA610432, AI912401, AW021917, H80203, AI623764, AI923052, AI821044, AI354423, AA515728, AI679413, AI061313, AA604645, AA528390, AW270258, AA582554, AL079734, N32944, AA652868, AI206841, AI783911, AA569667, AA745653, AI962030, AA410788, AI733856, AI244127, AL040054, AW271917, AA579179, AI499954, |

| HMSGP45 | 3399 | 699243 | 1 - 428 | 15 - 442 | |
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| | | | | | AI569086, AI862716, AW020088, AI620585, AI885488, AI078409, AA584066, AI561060, AA284247, AL120343, AA828047, AA192293, AI801505, AW157005, AI189682, F24728, AA644090, AA862243, AI669589, AA228778, AA601278, AI335963, AI310343, R92640, AI755214, AA828867, AI754567, AA831345, AI754105, AA643770, AW088049, AA654874, AI809818, AI081147, AA598605, AL121016, AL121653, AL096791, AP000501, AP000011, AC005081, AP000212, AP000134, AC005746, L78810, AL008718, AL022316, AC004112, AC009516, AC005399, AC004883, AL031680, AL031432, AL035400, AC006480, AC006487, AP000552, AC005755, AL021397, AF196972, AC004967, AI008715, AF111168, AP000689, AC006023, AC004019, AC008040, AC004841, AP000030, AC006960, AC006312, AI034549, AL020997, AC005921, AC005725, AL133500, AC005231, U80017, AC007676, AL031228, AL034555, AC005726, AL050318, AC004834, AC002316, AC005412, AC005102, AC004686, AC005696, AC006262, AC006013, AF031078, AC005520, AF196969, AP000350, AC006120, AC007216, AF030876, AC006057, AC000052, AC006211, AI.109628, AC004859, AL035659, AC007055, Z85986, AL078638, AC004033, AC004262, AC002492, AL122003, AL035458, AL109798, AF196779, AL022328, Z97054, AC004552, AC018633, AC006271, AL049872, AC005620, AC007011, AL080243, AC005274, AC002543, AC005722, AL121658, AC005786, AL031295, AC005874, AF134471, AC004655, AC007773, AP000557, AC004815, AC004832, AC005086, AL133353, AC007919, AC005694, AC005519, AC002425, AC006449, AC005209, Z95152, AL049539, AC000026, AC006511, AL031279, AC002476, AC005500, AC005288, AL035587, AC004000, AC007421, AL049795, AC007731, AC006441, AC007242, AC005058, Y18000, AL049569, AC005800, AC004983, AP000356, AC006277, AC008372, Z84487, AL022319, AC020663, AJ246003, U78027, AC002477, AF001549, AL022313, U89337, AC004685, AF053356, AL096701, AL117694, AL133163, AF134726, AC005480, AC005523, AC003965, AP001053, AF200465, AL031848, AC012384, AP000359, AC007370, AC002314, AC004447, AC005527, AC004813, AL031681, AC004263, Z86090, AJ003147, AL035422, AC004254, AC005531, AI.022320, AC006323, AC003982, AC003070, AC002470, AC004887, AC002310, AC007376, M89651, AC006450, AC005031, AC006077, AC005342, AL049776, AC005952, AP000251, AP000346, AC004890, AL049636, AL121757, AC003950, AC004408, AC004386, AC005856, AC000081, AC005695, AL031311, AC005940, AC004150, AC007690, AC005529, AC007285, AC007308, AC004477, Z84466, AL024498, AP000555, AC007225, L44140, AC000003, AC004491, AC007999, AL022165, AP000555, AC005736, AC005037, AP000511, AC005778, AL031005, AC005821, AC007279, Z95116, AC005233, AP000694, AF190465, AP000245, AC004185, Z95113, AC005484, AC005763, AC005666, AL109801, AC002059, AL031575, AC004797, AC000353, AL139054, AC004216, U91326, U07563, AL021977, AL008582, AC005291, AC002301, AC005200, AC005057, AP000311, Z98750, AC004895, Z84469, AC004662, AC007386, and AL049766. |

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| HMSGP49 | 3400 | 723131 | 1 - 376 | 15 - 390 | |
| HMSGP73 | 3401 | 925385 | 1 - 961 | 15 - 975 | AI740741, AI435434, AI475908, AA626659, AI802875, AA262760, AI524192, AA279545, AA262840, W45255, AL138162, and AC004490. |
| HMSGQ30 | 3402 | 692880 | 1 - 393 | 15 - 407 | AC007390. |
| HMSGQ57 | 3403 | 733869 | 1 - 406 | 15 - 420 | AI468586. |
| HMSGR88 | 3404 | 575241 | 1 - 214 | 15 - 228 | AA070885, AI884861, AI473995, AI073373, AI903464, AA357979, AA078184, T39390, AI903448, AA578626, AAS25407, AI207476, AAS84208, AA313133, AI143653, C14576, AI869786, AI289396, AI921491, AA713705, AAS13189, C15336, AA078137, AAS25517, AA173166, AW081857, N34258, AA347653, R48980, AAS84484, AI570380, AA247731, AA304790, AA961966, AW238639, C15180, AA628740, AI049630, AA373861, AA322542, AA078509, AA295893, AAS33660, AA295899, AA633799, AL036665, AA633981, AAS65232, AA633875, AA666066, F03907, AA601653, AA736713, AAS13916, AW327555, AA492524, AI889426, AA493628, AI045423, C15362, AA402113, T49133, AI468993, AA229030, Z36248, T39420, AA084950, AA468923, AL036070, AW438993, AI866971, AL134664, H92398, T06876, AA714190, AA314338, AI431513, AA133013, W52705, AI733856, AA985145, W59977, AA744095, H92613, AA713735, F35684, AI863246, T08386, AA363003, AI338575, F10822, AA308598, F30497, AI624038, AAS69206, T07225, AA757758, AI065043, AA302557, AW128881, AI188049, AI590404, AA115655, T03928, AA206366, AA181917, T72631, AI223968, R49266, AI654658, W44359, T64928, H74324, AI679221, AI281401, AI479806, T30418, AW105463, AA683091, AA350406, AW337805, AI859906, H69517, AA728911, AI612810, AC008125, AC004887, D87012, AC011331, AC005551, AL035659, AC002091, AC005015, AL031651, AC003962, AC002326, AL023575, AC006963, AC002364, AC004687, Z98036, AC004703, AC005865, AC005865, AC004859, AL049569, AC004131, AC005280, Z99716. AF048727, AL133289, AC004383, AC007308, AL049548, AC004891, AC006043, AI021393, AC005081, AL133448, AC004832, AC006000, AC012099, AL035249, AP000303, AL035072, AP000049, AP000116, AP000114, AP000046, AP000311, AL009031, AL009031, AC003682, U62317, AC007011, AC007421, AL031663, AC005005, AC007993, AC006160, AC004778, AI031664, AC004844, AC005089, AC002563, Z81365, AC002303, AC005231, AL117694, AC005086, D86995, AC003098, AC004100, AL050348, AL050348, AP035667, AP000555, AC005726, AC007546, AC004216, U62293, U63721, AC005057, AC003973, AC005874, AF134471, AL132826, AL008634, Z82244, AL049869, AC006312, AC006275, AC004675, AL049576, AC006578, AC003681, AC007899, AL133312, AC006336, AC007292, AJ011931, AL020993, AL031781, AL050307, AL031290, AL035417, AJ243213, AC005043, AC008015, AL133238, AF107885, AF205588, AC004150, AF088219, Z93241, AC007367, AC005942, Z49235, AC003007, AL109914, AC005632, AE000662, AC005952, AL049745, AC007193, AP000350, AC004983, AF024533, AC006146, AC010200, AB011126, AC003119, AC000379, AC004836, AC006251, AL031056, AC002312, AL049776, AC004882, AC004975, M94081, |

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| HMSGT45 | 3405 | 722069 | 1-363 | 15-377 | AC005736, AP000065, AL031659, AL049935, AC006030, AL008734, AC004776, AL049694, AL031676, AC004701, AC006039, AC004988, AC005037, U91322, AB020866, AC006270, AC008039, AC004789, AC002991, AC005786, AC005808, AL109798, AC002407, AC006365, AC002546, AC002530, AL034423, Z84466, AC002418, AP000469, AC004552, AC006360, AI022727, AF121898, AL009181, AC006026, AC004765, AC004386, AC004491, AC005529, AC007030, AC008038, AC005261, AC005932, AP000343, AC004156, U15177, AC006077, AL049843, AC005521, U95742, AC004448, Z97987, AP000696, AP000356, AC003082, AC007216, AP000355, AB013005, AF041001, Z95703, AC000353, U73645, AC008989, AC004622, AC004587, AP000045, AP000113, Z85987, AC007880, AC005048, AC003003, Z85986, U91318, AL021937, AF001550, AF196779, AL079306, AC004106, AF172277, AP000008, U95743, Z83826, AC005036, AL109748, AC005376, AC004938, AC006024, AC006959, AC002401, U91325, AF121782, AC005011, AL031053, AC005815, and AC006313. |
| HMSGU52 | 3406 | 727300 | 1-313 | 15-327 | R00440, H65822, AI032598, and AI655884. |
| HMSGU76 | 3407 | 677512 | 1-283 | 15-297 | AC004634. |
| HMSGU89 | 3408 | 963497 | 1-467 | 15-481 | AI791905, W31955, AI739525, AA459612, AA486469, AA410963, AW291807, and AW137789. |
| HMSGV47 | 3409 | 920116 | 1-409 | 15-423 | AA568624, and AC002477. |
| HMSGW16 | 3410 | 767621 | 1-343 | 15-357 | |
| HMSGX02 | 3411 | 920511 | 1-347 | 15-361 | AC005946. |
| HMSGX12 | 3412 | 792437 | 1-268 | 15-282 | |
| HMSGX14 | 3413 | 871492 | 1-452 | 15-466 | AW386461, AW386289, AW386672, AW386599, AW386619, and T52919. |
| HMSGX43 | 3414 | 715425 | 1-290 | 15-304 | |
| HMSHA04 | 3415 | 757509 | 1-236 | 15-250 | |
| HMSHA37 | 3416 | 708660 | 1-347 | 15-361 | |
| HMSHB10 | 3417 | 964651 | 1-364 | 15-378 | |
| HMSHB14 | 3418 | 657543 | 1-351 | 15-365 | |
| HMSHC94 | 3419 | 960196 | 1-379 | 15-393 | AC006566. |
| HMSHD50 | 3420 | 724397 | 1-387 | 15-401 | |
| HMSHE51 | 3421 | 725692 | 1-364 | 15-378 | |
| HMSHE55 | 3422 | 923378 | 1-433 | 15-447 | |
| HMSHG24 | 3423 | 676545 | 1-348 | 15-362 | |
| HMSHI54 | 3424 | 920119 | 1-392 | 15-406 | AL042448, and AF001549. |
| HMSHI94 | 3425 | 967167 | 1-579 | 15-593 | AA521310, W22173, and AF093097. |
| HMSHK14 | 3426 | 920106 | 1-362 | 15-376 | |
| HMSHL09 | 3427 | 789229 | 1-231 | 15-245 | AA954108. |
| HMSHL18 | 3428 | 690655 | 1-340 | 15-354 | AA504649, AI243516, AA936359, AA749365, AA748744, AI687298, AI219611, and AL110200. |

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| HMSHL85 | 3429 | 1 - 348 | 15 - 362 | AL117354. |
| HMSHM28 | 3430 | 1 - 523 | 15 - 537 | AA476784. |
| HMSHO64 | 3431 | 1 - 398 | 15 - 412 | |
| HMSHP08 | 3432 | 1 - 364 | 15 - 378 | |
| HMSHQ07 | 3433 | 1 - 569 | 15 - 583 | |
| HMSHR29 | 3434 | 1 - 811 | 15 - 825 | R25085, AA281484, AA099305, AA351609, W96314, and AL137561. |
| HMSHR64 | 3435 | 1 - 406 | 15 - 420 | |
| HMSHT10 | 3436 | 1 - 376 | 15 - 390 | AI358229, AA587604, AA908687, AW079135, AW406755, AI457397, AI365088, AA613203, AL119691, AI334443, AW069481, AW419262, AI745325, AI281881, AI053672, AA652764, AI654525, AA482768, AI124759, AW338086, AI270559, AA669840, AA446657, AA610491, C05986, AI284640, AI754253, AW193265, F36273, AI131164, AA581903, AL046457, AW088058, AA551552, AL046205, AA346458, AA613232, AI799642, AI305547, AI821714, AI792133, AI791913, AL038705, AW270270, AA280632, AA503600, AW029038, AA493708, AW079792, AW439558, W79504, AW301809, AA828749, AI431240, AW407578, AA738034, AL120687, AI249997, AA720702, AA580808, AA502866, AI564185, AA613227, AW273218, AA973803, AA113861, AI866908, AI821785, AA309257, AW167372, AL119984, AA164251, H96730, AI245679, AA665021, AI684097, AW089322, AA747777, AW166815, AI471481, AI623696, AL138455, AI623898, AI076616, AL038474, AW341900, R91145, AA631507, AA767971, AW406162, AA569471, AI921296, AI434695, F25135, AA244286, AI299694, AA643962, AA722372, AA521323, F28204, AA713815, AI148277, AI951863, H77643, AA533725, AW021207, AI370878, AW149339, AL022328, AI096701, AC004033, AC005480, AC007731, AC005500, AC004637, Z98051, AC003007, AC006251, AL049569, AC005261, AC005632, AL021808, AC007666, AL049759, L47234, AC005900, AC006275, AC004019, AC004686, AC000052, AC005837, AL049776, Z86061, AC004967, AL020993, AP000114, AP000046, AL049643, AC007510, AC005527, AC004827, AC007207, AI049709, AC004987, AC006205, U85195, U80017, AC005089, AC007685, AE000658, AC007226, AC004638, AC006511, Z82097, AC002091, AC006017, AC006271, AC005231, AC004982, AC004491, AC005971, AC006449, AC002350, AL080243, AC004815, AC016025, AC004148, AC005696, AP000359, AC004848, AC001228, AC006040, AL109939, AL135744, AC000045, AL023913, AC008012, Z97054, AF196779, AC003029, AL022163, AC007390, AC002429, AP000115, AL022302, AC007114, AC005868, AC006312, AC005180, AP000402, AL031777, AC006482, Z83823, AC005529, AC006285, AC009721, AC006014, AC005901, X74558, AC006001, AC004812, AC004626, AC004832, Z69666, AC004765, AC006571, AC005747, AC007227, AC002448, AL008718, AC005841, AC006480, AP000141, AC000025, AL035072, AC005288, AC004997, AC005300, AC002347, AL132774, AC007298, AC005488, AC007151, AL034430, AC004755, AC006063, AC006208, U82668, D87675, AC003048, AC004975, AC005486, AC000353, AP000132, AP000210, AC005006, AC008101, AC002544, AB020859, AP000030, |

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| HMSHT46 | 3437 | 959516 | 1 - 242 | 15 - 256 | Z69705, U91326, AC008372, AL033392, AC005230, AC000094, AC005722, AC005585, AL023575, AC005324, AP001068, Z82244, AC007537, AL031687, AC003043, AC016027, AC016831, AL031283, AL121591, AC007308, AC007845, AL021937, AC004099, AC005775, AC005004, U95742, AC008079, AC004963, AC003688, AC016830, AC004931, AC004754, Z99716, AC007766, AC005598, AL132994, AC007324, AL021453, AC006130, AC005406, AC007216, AL117258, AP000509, AF165926, AL139054, AC004069, U78027, AP000065, Z85987, AL110502, AL034417, AL139054, AC004659, AC003030, AL031277, AC006958, AL049699, AL031588, AL022721, AC004966, AC005911, AF001549, AC008018, AC005387, AC006213, AC000085, AP000553, AL008716, AC005678, AC005154, AL031602, Z99754, AP000088, AL031584, AC004986, AL121603, AL021707, AL021393, AC007535, AL021977, Z83840, AC005844, AC006071, AC005209, AL022322, AF190465, AL117328, AF045555, AL034451, Z75744, AC005808, AL008723, AC007051, L44140, AC002316, AC006111, AC007387, AL031311, AC007919, AC003664, AC005839, AL133355, AL121825, AC002476, AC005541, AC005670, AC004890, AC007686, Z84572, AC006116, D87009, AL031666, AP000249, AC005562, AC002045, and X60459. |
| HMSHU10 | 3438 | 964646 | 1 - 401 | 15 - 415 | AA780867, AA746360, AI367306, AC004540, AL080243, AL031577, AC005086, AC005546, AC007227, AF001548, AL031255, AF024533, AL035455, and AC016473. |
| HMSHU55 | 3439 | 731775 | 1 - 507 | 15 - 521 | |
| HMSHV09 | 3440 | 731740 | 1 - 343 | 15 - 357 | |
| HMSHV44 | 3441 | 716596 | 1 - 531 | 15 - 545 | H67330. |
| HMSHW22 | 3442 | 855779 | 1 - 380 | 15 - 394 | |
| HMSHW84 | 3443 | 783036 | 1 - 274 | 15 - 288 | AC006241. |
| HMSHW93 | 3444 | 792302 | 1 - 299 | 15 - 313 | R25210. |
| HMSHY07 | 3445 | 953331 | 1 - 494 | 15 - 508 | |
| HMSHZ03 | 3446 | 924136 | 1 - 523 | 15 - 537 | |
| HMSHZ56 | 3447 | 733386 | 1 - 302 | 15 - 316 | |
| HMSIA12 | 3448 | 948521 | 1 - 714 | 15 - 728 | |
| HMSIB73 | 3449 | 578777 | 1 - 433 | 15 - 447 | AA936787, and AC003962. |
| HMSIB86 | 3450 | 785493 | 1 - 576 | 15 - 590 | M62052, and AC007263. |
| HMSIC37 | 3451 | 685586 | 1 - 408 | 15 - 422 | |
| HMSIC72 | 3452 | 740365 | 1 - 359 | 15 - 373 | |
| HMSID81 | 3453 | 774047 | 1 - 489 | 15 - 503 | |
| HMSIE11 | 3454 | 967013 | 1 - 124 | 15 - 138 | AA312074. |
| HMSIE52 | 3455 | 727146 | 1 - 353 | 15 - 367 | AA525024, AA525066, AA595766, AA524685, AI914785, N71720, AI401643, AA502477, N57913, R59126, AI471755, AI282710, AC003080, Z83847, AC005500, AC002352, AC000353, |

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| HMSIG74 | 3456 | 725842 | 1 - 420 | 15 - 434 | AC004383, AC004216, AL035461, AF053356, AC006430, AC004617, AC005071, AC006241, AC004382, M89651, AL035086, AC004638, AC007664, Z84466, Z93341, AC002992, AC002551, AC005484, AC002549, AC004055, AF109907, AC007226, AC004858, AC006213, S62834, M97764, AC004968, AC002472, AC005280, AC008040, AC005005, AP001053, AC007685, AC004910, AC004033, AC003957, AC004242, AL034379, AP000240, AC005736, AC005095, AP001052, AJ011930, AL122020, AC007193, AL049631, AL049712, AC007773, AL022336, AL022162, and AC004526. |
| HMSII81 | 3457 | 385937 | 1 - 311 | 15 - 325 | R96445, and H70887. |
| HMSII85 | 3458 | 916552 | 1 - 278 | 15 - 292 | AA487995, AI469687, AA487884, F18394, AA776236, AW383129, AI245679, AI364570, AI801591, AW118517, M77950, AI471374, AI355281, T56067, AA364193, AA654998, AI880002, AW157599, AA662017, AA359366, AA365248, AA102412, AI561335, AA584588, AA648064, AA652348, AA299151, AA593533, C15073, AA620525, AA480762, AA862213, AW383634, AI148245, AI910609, AI597832, AI431232, AI832782, AI040313, AL119649, AW302013, AW383608, AW383628, AA533450, AW383440, AW383542, AW383586, AW276172, AI952786, AI986251, AW383596, AW383605, AW383624, AW383606, AA653221, AA653975, AI367471, AI367401, AI355224, AI367420, H15679, AI049940, AL047602, AW272925, AI805380, AI418327, AI702095, AI186470, AI720431, AI684208, AI753567, AA632407, AI677668, N41759, AW082063, AA704147, AA533038, AW025031, T29360, H61393, AL048266, AI354587, AI538928, AI613473, AI635314, AA088841, AL135674, AA704123, AI341664, AI806850, AI198376, AA514737, AA094651, AA302970, AI682998, AI744188, AA053551, T58118, AW190947, AI915068, AA283761, F35659, AA404499, AI357477, AA364224, AA299601, AA228830, N25303, AA323547, AI613459, T67425, T05319, AA937687, AA813902, AW021285, AL119295, N70648, AI493546, AA635331, AA437161, AA535661, AI619997, AI521901, AI306524, AI925040, R80865, AI624698, R94354, W45336, R42293, AW193512, AA838333, AI249997, AI305547, AA702023, AA613893, AI744170, AA091452, AI174535, AA164960, AI572564, AI699060, H64560, AA179090, AI493634, AA829106, AA284184, AI783494, AA669522, AI270343, AW172727, AI439360, AI829331, AI802526, AI679713, W47444, AI587565, AA553385, AI287964, AI587583, AW151884, H97666, AI561255, AW383560, AW338086, AA332215, AW383455, AW383629, AA648110, AI128353, AI341548, AA179136, AI366071, AA079528, AL041382, AW338292, AI915293, AA629597, AA765979, AI110760, AI539114, W04195, AW103415, AA192695, AA481363, AL037574, H98660, AI582890, AW084253, AA481375, AW241511, AA362700, AW241456, AA584749, AA826144, AI805563, Z98473, AI281474, AA532955, AA342958, AA443065, AI270117, AW327282, AI345675, AA507246, AI345681, AI038833, AA491814, R26134, H60735, AI801205, AA013176, AL041706, AI633390, AL034402, AC005215, AC002301, U24498, AC002457, AF064866, U95090, AL020995, AL021938, AC000067, AC005661, AC004929, AL031722, |

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| AL021328, AC005081, AC002467, AB002059, Z97054, AL132716, AC004882, AC004638, AC006239, AL031274, AL031777, AC004856, AC004024, AC002036, AC005529, AC009223, AC005255, L13709, AC002347, AC005159, AL031296, AL031594, AC004673, AL135744, AL049869, AC006385, AL009031, AL023807, AL049872, AC007156, AC006211, AC002326, AC007250, AL109622, AL031321, AC003684, AF050154, AC007225, AL132718, AL008627, AC006140, AB023052, AL022397, AL031255, AL031651, AL096701, AL121653, AC005071, AL031670, AC002558, AC003085, AL049757, Z99570, AC003982, AC002386, AL109623, AC004499, AC007738, AC007240, AC006204, AC004522, AC006111, AL133245, AC008134, AL049766, AL080285, AC005755, X76629, AC000379, Z86064, AC002395, AC007325, L13713, L13714, Z70225, AC004967, AL035690, AC004500, AC006011, AC005361, U07563, AC004875, U78027, AC005520, Z81359, Z82899, AL109827, Z69666, AF124523, AL035494, AC006030, AC004815, Z94277, AC004990, AC004822, AL109758, AC006132, AC006166, AC007136, AL121576, Z97205, AL031295, AF118808, AC006001, AJ003147, AC004655, AL035422, AC002312, AF152365, AC007344, AC007919, AL078476, AC002472, AC010582, AP000305, AP000047, AP000115, AC004492, AC007130, AC005541, AC009044, AC006120, AC004963, AC009336, AC007877, AL035361, AC007664, Z78615, AL021368, AJ010598, AC005069, AC008967, AC007384, AC005324, AC007162, AC004009, AL078472, AC005699, AC010200, AC005701, AC004527, AP000301, Z80899, AF039906, AL096768, AC005785, AC007160, AC005827, AL031685, AL031668, AL031848, AC006285, AC002038, AC007546, AC007686, U67221, AB023051, AL050308, L44140, AL049760, Z84722, D87675, AC005495, AC007388, AC006241, AL050321, AC004682, AF165926, U72790, L48476, AC004739, U40369, AL0223111, U72787, AC003064, AF061032, AP000546, AC007759, AC002106, AC002471, AC005787, AC005512, AC004511, AC006126, AC005775, AL022302, AC004042, AL021546, AC004013, Z83819, AL031662, AC004752, Z98885, AL031178, Z98256, AL049651, AC007200, AB020865, D87009, Z98052, AL034420, AL031666, Z82195, AL009174, Z93016, Z94721, AL022718, AC007690, AL009179, AL021939, AF001548, AC004984, AL078603, AC005940, AJ010770, AC006064, AL121577, AL021395, AC005899, AC006210, AC005832, AC004106, AC008372, Z97634, Y12855, AC005355, AF181449, AC006996, AC006121, AC004616, AC003002, AC004547, AL049747, L81583, and AC001555. | 3459 | 963441 | 1 - 559 | 15 - 573 |
| AA400632, AA368986, AA400317, AA811357, AI815926, AA353038, AI815728, AI886832, AI554783, AA740345, AA676886, AI833007, AI090223, AI148002, AW081785, AI436367, AA513753, AI797479, AII91303, F26406, AI188727, AA536076, AI432454, R07547, AI336523, and AI970899. | 3460 | 728670 | 1 - 299 | 15 - 313 |
| | 3461 | 741811 | 1 - 398 | 15 - 412 |
| AC005950, and AC001228. | 3462 | 767680 | 1 - 396 | 15 - 410 |
| | 3463 | 792379 | 1 - 602 | 15 - 616 |
| HMSIN64 | | | | |
| HMSIN75 | | | | |
| HMSIO61 | | | | |
| HMSIO76 | | | | |
| HMSIP13 | | | | |

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| HMSIP59 | 3464 | 739275 | 1-477 | 15-491 | |
| HMSIS02 | 3465 | 920078 | 1-438 | 15-452 | |
| HMSIT63 | 3466 | 745068 | 1-360 | 15-374 | AP000150, D83253, and AP000009. |
| HMSIT73 | 3467 | 708077 | 1-309 | 15-323 | |
| HMSIU50 | 3468 | 706363 | 1-349 | 15-363 | AC007537, and AL109865. |
| HMSIV17 | 3469 | 712318 | 1-505 | 15-519 | |
| HMSIA36 | 3470 | 685633 | 1-242 | 15-256 | AL121652. |
| HMSIA69 | 3471 | 745227 | 1-323 | 15-337 | |
| HMSIB02 | 3472 | 920065 | 1-552 | 15-566 | |
| HMSIB64 | 3473 | 969637 | 1-356 | 15-370 | AL043325, and D29677. |
| HMSIB83 | 3474 | 781172 | 1-303 | 15-317 | F06560. |
| HMSIB93 | 3475 | 676414 | 1-411 | 15-425 | |
| HMSJE47 | 3476 | 928252 | 1-527 | 15-541 | |
| HMSJE52 | 3477 | 868167 | 1-455 | 15-469 | |
| HMSJE69 | 3478 | 513164 | 1-598 | 15-612 | |
| HMSJH79 | 3479 | 760667 | 1-420 | 15-434 | |
| HMSJT22 | 3480 | 674557 | 1-584 | 15-598 | AC004262. |
| HMSJJ24 | 3481 | 928152 | 1-651 | 15-665 | AI144557, AA777781, AI418005, AW139587, AW206289, AI627853, AI493150, AA827263, AW301021, AA196170, AI367643, R84740, AW139788, AI539840, AA992466, AL135079, AA342835, AA018860, AW341838, AA889455, AI086195, AI032948, AA136660, W95055, AW277153, AI123630, AC006987, AL031846, AC007276, and AL035461. |
| HMSJJ83 | 3482 | 781094 | 1-312 | 15-326 | N71930, AA557879, AW193546, AL137954, AL120502, AA368936, AA578961, AA441788, AW072923, AI432270, AW406659, AI379719, AI499094, AI143242, AW069807, AI499503, AA837783, AA342901, T07324, AI307201, AA594215, AI160117, AA483034, AI635818, AA484148, AL119298, F28576, F36373, AA626637, AA528679, AI569086, AW265197, AA601270, AA309460, AA652057, AA649642, AI003734, AL041706, AA658846, AI079910, AA641103, AA493508, AI707788, AW193500, AW302117, AI890928, AI709066, AA095511, AI890570, AW088058, AI334435, AW340844, AL079645, AA694169, AW438916, AW057877, AI264743, AA578154, AL042856, AI312149, AA715270, AI357551, AA448858, AI051551, AI471374, AA484262, AA125788, AL079843, AI445436, AW408161, AA355281, AW406447, AA471741, R72392, AI281903, AI754291, AA548137, AA715268, AW276435, AW276932, AI557323, AI561335, AW264969, AI609223, AW173651, AI963786, R13151, T92445, AA360694, AI345518, AI469172, AI435544, AA341228, AW238016, AI963016, R13151, T63104, AI114660, AA657533, H70615, AI801591, AA608710, F33511, AA338522, AI674873, AI914706, AA448838, AI312309, AI654588, H55894, AA862225, AW188679, AA443695, T08638, AA584581, AA357987, AL110418, AA599495, AI473701, AI279759, AW249835, |

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| HMSJL41 | 3483 | 922753 | 1 - 504 | 15 - 518 | AL022721. |
| HMSJM33 | 3484 | 702408 | 1 - 411 | 15 - 425 | AC005233. |
| HMSJO36 | 3485 | 708084 | 1 - 397 | 15 - 411 | AA502207, AI078409, AA635150, AI003391, AA182569, T16427, AA112646, AA551062, AI307563, AA458452, AA228442, F02399, AL135490, AA661590, AA021354, AI446478, AI302350, AA720732, AA722505, AA582554, AW081303, AI190648, AI270476, AI798493, AI302994, AA413406, AA021388, AI040051, AW081303, T03928, AI354243, AI453321, AI538075, AA631915, AA054170, AI610468, AA483103, AI862716, AI583466, AC004893, AL031597, AC004685, AC002544, AL035420, AC005839, AP000501, AL132777, AC006208, AC004000, AC005049, AC002476, AF165926, AL022476, AL133246, AC000353, AC006211, AC007096, AL035685, AL031774, AC005531, AC005081, AP000103, AC005726, AC007637, |

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| | | | | | AC003043, AC007225, AC005274, AC004973, AC007773, AC005089, U91326, AC007993, AL031735, AC005411, AC005480, AC004033, AC005535, AL117352, AC004079, AC008116, AC004796, AL049697, AL031118, AL031667, AP000355, AC002492, AC003029, AP001052, AC000003, AL031432, AC004895, AL031673, AL008718, AC007216, AL050327, AR023048, AL121653, AL132712, AC004129, Z84487, AF196969, AC005064, AC005011, AC004139, Z98200, AC005777, AF038458, AC004686, AC004834, AC005412, AC004851, AP000211, AP000133, AC005363, Z97630, AL008710, AL034402, AC006077, AF053356, AL049872, AC008134, AL035072, AC004231, A1035683, AP000555, AL022313, AL022396, AC004526, AF134726, Z83826, AC004913, Z81365, AL049874, AL035450, L78810, AF030453, AC007551, AC006581, AC005837, AC004596, AC005907, AL033524, AF111169, AC006511, Z98941, AC003101, AC004841, AL008629, AC007226, AC005822, AC004814, AL049839, AL034582, AC007510, AL133448, AL034400, AL035413, AC006241, AL109758, AF001550, AC016830, AC005874, AF134471, AP000557, AC007686, AP000689, AC007283, AC005971, AJ246003, Z85996, AL136295, AC005228, AC007387, AC005520, AC007263, AL049569, AC002369, AL022165, AC004019, AC005229, AC002565, AC006039, AL035587, AL121658, AF067844, AL035249, Z98751, AC004216, AL034548, AC003663, AC005722, Z94056, AC007546, AC005332, AC004073, AL035089, AC005015, Z99716, AL035455, S42653, AC002554, Z82190, AC000159, AC004963, AC006449, AL035405, AC006441, AL049776, Z98304, AC008372, AC003962, AL031053, AC005154, AF001549, AC004655, AC005537, Z97053, AC006547, AC005881, AB020868, AL020993, AC005088, AL109952, AP000563, AC002430, AC002300, AL049759, U95739, AC004020, AL133163, Z93023, Z83843, AC002553, AC003035, AC007688, AC002350, AC005755, M89651, AC007384, AL031680, AC002302, AC005736, AC005209, AC003684, AC006126, AC002126, AL109984, AC000025, AC004876, AC004707, AC002375, AC005828, AL109627, AL021395, AC005280, U91323, AC006273, AR003151, and AC004678. |
| HMSJO44 | 3486 | 716600 | 1 - 378 | 15 - 392 | AA740736, W61253, AA780648, AA167179, AI150934, T03928, AA743718, AA598889, AA865640, AI082150, AC007421, AC002091, Z82206, AP000691, AC006047, AC005484, AC004185, AL031680, Z59638, AP000692, AL033527, AC006538, AC016025, AL122020, AC007684, Z85986, AC002481, AC006511, AF217403, AL133249, AL022323, AL031311, AP000509, AC004668, AF196969, AC006960, AL109963, Z85994, AL049641, AL031846, AL021528, AC005342, AF207550, AC004953, AL031602, Z98941, AC005829, AC005332, AF111168, D84394, AP000228, AL031597, AP001056, AC005694, AL035455, and AC004017. |
| HMSJR07 | 3487 | 854106 | 1 - 495 | 15 - 509 | AA565398, AA382192, T73974, N87333, AW132065, AA557727, AA639939, AI049924, AI281622, AI887397, R57089, H59974, AA654293, AI911936, AI923263, H97930, AA070614, AA370883, AA618451, AA468247, N27874, AI601229, AI754653, AA468318, AA669747, AA584765, R77715, AW271071, H80215, AI419419, AI423034, AA721581, AA165079, H47641, F07225, T47096, AC005838, AL049646, AC002128, AL117354, AL049795, AL049712, AF118808, AF001905, AL137191, AC005994, AL049844, AL109865, AL022400, AF111168, |

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| HMSJR27 | 3488 | 855760 | 1 - 576 | 15 - 590 | AC006313, AL035458, AC005730, AL035443, and AL034344. |
| HMSJR41 | 3489 | 967070 | 1 - 416 | 15 - 430 | AA002166, AA256383, AA699351, AA176339, and AJ249977. |
| HMSJR74 | 3490 | 710402 | 1 - 427 | 15 - 441 | |
| HMSJT11 | 3491 | 965007 | 1 - 1744 | 15 - 1758 | AI962693, AA135585, AL137976, AI417140, AA745126, AI352492, AA436379, AI379403, AW006280, AA135524, AA234271, N22187, AA491640, AA256692, N71230, H23394, F12594, and AB011127. |
| HMSJT60 | 3492 | 733379 | 1 - 258 | 15 - 272 | AA218874, AW069273, N57205, AA975894, AA831375, H81732, AA730795, T98915, T62975, AA370455, AA330772, AA828696, R79496, R93081, AA348602, AI472686, AA968509, H97358, AA676621, AA317096, H12383, AC005099, AC004448, AC007327, AC005921, AC000063, AL033523, AC005736, AC002395, AP000556, AP000557, X77744, AP000553, D87011, AC007240, AC004961, AC004821, AC007666, AC007227, AC000052, AC004019, AC007226, AL135744, Z81308, AL049766, Z82194, AL035415, AC010170, AP001053, AP000252, AL023755, AP000134, AP000212, AL080276, AP000031, AC008372, Z86090, AC005914, AP000281, AC007999, AP000039, AP000107, AL049576, AC004706, AC007055, AC007151, and AL117337. |
| HMSJT70 | 3493 | 756465 | 1 - 385 | 15 - 399 | |
| HMSJT79 | 3494 | 954141 | 1 - 433 | 15 - 447 | |
| HMSJU28 | 3495 | 686664 | 1 - 400 | 15 - 414 | |
| HMSJV67 | 3496 | 751602 | 1 - 401 | 15 - 415 | |
| HMSJW12 | 3497 | 902568 | 1 - 3126 | 15 - 3140 | AA585278, AA283312, AA585378, AA585389, AI526112, AA585116, AA585325, AA585329, AA585430, AA585439, T48593, AA585356, AA585327, AA585098, AA585453, AI525306, T26367, AW366296, AA585351, AA585101, AI541402, AI546855, AI541515, AF135243, A85395, A85476, AB005666, AR031358, AR017826, AR031365, AJ131952, AR037157, X82786, X55499, AR008429, AR062871, A25909, AJ007320, A70872, X93517, A44281, A94995, A70899, AR029417, A70869, AR060142, AR060137, A30438, Z79475, I50122, AR038669, A91667, M60510, A91666, AR060134, A84772, A84776, A84773, A84775, A84774, A83076, AF134119, Z79435, U79666, A91750, X84816, AR028672, AB005559, U89315, AR060057, AJ009991, AJ012010, Z31700, and A44216. |
| HMSJW19 | 3498 | 744990 | 1 - 691 | 15 - 705 | AL043195. |
| HMSJW25 | 3499 | 678096 | 1 - 534 | 15 - 548 | AL122020. |
| HMSJZ11 | 3500 | 861381 | 1 - 587 | 15 - 601 | |
| HMSKB02 | 3501 | 920056 | 1 - 488 | 15 - 502 | |
| HMSKB24 | 3502 | 855883 | 1 - 196 | 15 - 210 | |
| HMSKC56 | 3503 | 733388 | 1 - 397 | 15 - 411 | |
| HMSKC66 | 3504 | 783028 | 1 - 371 | 15 - 385 | AW058639, AI339743, AA465532, AI698594, and AL133112. |

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| HMSKC90 | 3505 | 675055 | 1 - 373 | 15 - 387 | AC004751. |
| HMSKF32 | 3506 | 699273 | 1 - 383 | 15 - 397 | AC008545. |
| HMSKF62 | 3507 | 966084 | 1 - 587 | 15 - 601 | AI203185, AW239380, AF094516, and AL122075. |
| HMSKG23 | 3508 | 675885 | 1 - 381 | 15 - 395 | |
| HMSKI08 | 3509 | 959413 | 1 - 509 | 15 - 523 | |
| HMSKQ60 | 3510 | 495734 | 1 - 513 | 15 - 527 | AW085811, AI188327, AI065031, AW069769, AA661583, H64858, H64884, AI962030, AW021399, AW023975, AW151848, AI609972, H59797, F35374, AI355246, AL042667, AL042670, AW023111, AI701898, AW237905, AW327673, AI250333, AW328331, AI733856, AI801479, AI890283, AI754257, AI439525, AI040051, AW069227, AI580472, T57096, AW243817, AA199578, AI174827, AW275432, AL121039, AI031759, AI702049, AW265468, AW328185, AI927275, AI744199, AW021917, AI733523, AA601336, AI571094, AI921744, AI567676, AI884404, AI251024, AW268793, AW021674, H38769, AA610381, AL044966, AI754653, AI017251, AI744890, AA493546, AW162314, W04260, AA809546, AW020612, AI925812, AI003469, AA644090, AI254267, AW085626, F23338, AIR59438, AA515728, AA507623, AI803824, AI061313, AA525753, AA503307, AW162332, AA640305, AI249365, AA526542, AL038936, AAR12133, AI572680, AA421536, AW028376, AW148821, AIR89177, AI267416, AA828834, AI312614, AW057760, AW410844, AI053696, AI221027, AI003068, AA526659, AA720732, AI000314, AI049955, AI133083, AA533660, AA526658, H86399, F29968, AW270385, N23504, AI547110, AA470933, AL036949, AA112864, AA947352, AI821901, AW020094, AW189853, AW268277, AI311796, AW301771, AI446618, AA653139, AI039257, AI246796, AW407007, H94598, AI872229, H62123, AI862716, AA593168, AI185160, M77964, AA636077, R79396, AI918661, AA807704, H47461, AI434103, AI679759, AL038533, N70293, AA600127, AI457313, AI064968, AI202777, AW190437, AI634187, AW131109, AI805556, AI361401, AA761454, AA428991, AA496042, AI363336, AI805373, AI343808, N35135, AW081610, AI732151, AA419107, AI653999, AA419014, AI798521, AI148840, AI566408, AI653776, AA502991, AA152398, AW419201, H68343, AA568303, AW082104, AA604149, AA600202, T90477, AA595561, AA515727, R93919, AA364147, AA598545, AI801505, W27084, AA551062, AC007666, AL031680, AP000048, AC000309, AL009181, AP000116, AC006449, Z84474, AL022320, AC004876, AC004760, AC005826, AC005755, AL121603, AC005993, AP000558, Z97055, AP000309, AC007314, AL049591, AC006379, AC004671, AC004765, AL035684, AC002351, AL022313, AC009247, Z83844, AL133448, AC005064, AL035484, AC004796, AL031255, AC005529, AL096712, AC005519, AC006344, Z83840, AC005527, AC004796, AC002336, AL031587, AL022721, AC009516, Z80232, AL034553, AC002418, AC005484, AL031255, AP001068, AC005300, AC006539, AC004386, AP000252, AP000107, AP000280, AC007686, AP001068, AC005300, AC006539, AC004386, AP000252, AP000107, AL117391, AC004019, AL034379, Z95116, Z97181, AC007917, AC005902, AL035445, AC008498, AC005288, AC007285, AF031077, Z81077, AC005736, AL109847, AC007051, |

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| HMSKS66 | 3511 | 413201 | 1 - 426 | 15 - 440 | AC005202, AC002565, AC006946, AP000212, AP000134, AC005089, AC004703, AC003682, AL022322, AC000029, AL035659, AL096791, AC002504, AP000692, AC004531, AP000019, AC004003, AC007216, AC006581, AL020997, AC007731, AC004973, AC006013, AC004883, AL033527, AC004912, AC005500, AC004814, AF165926, AC007358, AC007510, AL021707, AC004257, AP000556, AI035416, AC005253, AC005224, AC006388, AL031666, AC005971, AL050307, AL035079, AC005488, AF001549, L78833, AL050318, AL049761, AL122020, AL135744, AC002543, AC004032, AJ011930, AL035457, AC000353, AC007226, AI049869, Z81364, AC000387, AC004000, AC004752, AL078477, AC000105, AC007688, AL109984, AL117355, AL049760, AL031005, AC004099, AC005280, AP000362, AP000553, AL049743, AL133163, AL133246, AC004097, AC002996, AC005200, AL109952, AC004652, Z98749, AL022326, AC006273, Y18000, AC005409, AC004223, AC006453, AL020993, U96629, AL022396, AL080243, AF031078, Z93017, AC006441, AC003108, U85195, AC005399, AC005839, U95742, AL050321, AF030876, AC007536, AL021579, Z93930, AC003083, AE000658, AC003048, AC004033, AC006211, AL035086, AC004167, AC005740, AC006487, AF207550, AC006285, AC004659, AL132777, Z98048, AC005585, AC006971, AC006317, AL022476, AC006088, Z98200, U52112, AL049694, AC005393, AL031121, AC004865, AF109907, AC010205, AF117829, AC005754, AC006162, Z95329, AC008044, AC005358, AF134726, AC005821, AP000557, AC006597, AL121852, AL031591, AC009509, AL034429, AD000092, AC002369, AL049709, AC005254, Z98745, AL021808, AC005332, AP000264, AC004626, AC006125, AC005339, AC004034, AC004805, AC005412, AP000555, AL049778, AC005303, AJ246003, AL031296, AL096701, AC008009, Z84469, AC005183, AC007690, AL078584, AF003626, AL008710, and AL049646. |
| HMSKU36 | 3512 | 966289 | 1 - 374 | 15 - 388 | T64029, AC002115, AC006480, and AC005306. |
| HMSKU90 | 3513 | 920151 | 1 - 734 | 15 - 748 | |
| HMSKZ29 | 3514 | 690662 | 1 - 341 | 15 - 355 | AA745302, AI567391, AII60786, AA058312, AA553570, AI929298, AI929825, AI927261, AW157180, H71659, T06518, AA229422, AA523695, AA420729, AA425924, AA654874, AA445908, AI871913, AA378207, AI246061, AA634926, AA586433, W81372, AA378489, AI298079, H29914, AL037927, H73550, AI300818, AI310992, AI192440, AI380617, F26713, AA862075, AI811647, F33037, AA584207, AA077637, N58301, AA581247, AA630122, W21218, AA025872, AI342677, AA569053, AA728880, AA368329, AL044384, AW023111, AW019964, AW162128, AI915081, AA744410, AW419389, AA599423, F33126, AA721523, AA721530, AA363003, AA328387, T99179, AW275432, AA663373, T83057, AA282951, AL121287, AI054090, AA078128, AA568314, AA554257, AA079076, AI078409, N44146, AA714073, T54783, AI671077, R93919, N27615, AA904211, H81406, F30158, AA937809, AI866580, AA584493, T69879, AA579188, F23294, AI272649, AA127570, N36143, N86362, AI686470, R87135, AW245860, C16358, AA205436, AL134527, AI284543, AA214042, AW238575, |

AA584183, AI358542, AI254770, AI302156, R70883, AA541532, AA668905, AI251944,
AI284126, AA306530, AI251034, AI251203, AA315361, AI251284, AA837771, AI369580,
AA487226, AI250552, AA583546, AA937618, AI434037, AI434144, AA516214, T87883, F34939,
AA452887, AA642809, AW069537, F35684, AW236277, AA322484, AA223512, T08386,
AA613761, AI871691, T62543, T26476, AI439393, H67064, F05830, T6207R, R81176, AI355246,
H14566, AA314338, AI633386, AA640310, AA633197, AI798407, AA515728, AW161459,
AI198718, T47138, AA664298, R64640, AI860535, AA346870, AA219349, AA130609,
AI364568, AW029269, N92813, AW151541, AI445774, AA082509, AW157731, N34689,
AA610848, AA256107, N73021, AA137025, AW161879, F24745, AA460692, AW029618,
AA357850, AI191343, AA657897, AA460994, AI003797, AI433503, AA936548, AA488646,
H24953, AA501461, H90845, AA669054, AI418661, AA878344, AA657910, AA467774,
AL118510, AC002045, AL080243, AC005666, AL096678, AC003666, AC004913, AF207550,
AC006001, AC004787, AL031595, AB020872, AF017104, AC016831, AC002395, AI022717,
AB026898, AC005537, AC004835, AC005015, AC004616, AL049835, AC005920, AC004805,
AL049569, AC004887, AL133396, AC005037, AC009399, AL096776, AL033517, AC002112,
AL135960, AJ131016, AC005914, AL133304, AC005145, AL121754, AC006285, AC016025,
AC005756, AC004837, AL024509, AL117694, AC004843, AL022726, AL022724, U91326,
AF088219, AC005578, AC004828, AB017653, AL132777, AL096701, AJ006995, AC004883,
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Z54072, AC006547, AC002073, AC005664, AL049776, AC004656, Z82195, AL139054, AL031984,
AP000065, AL031983, AC007681, AP000498, AC004854, AC009802, Z86599, Z84488, AL008707,
AC004836, AC008975, AC007637, AC002390, AL133243, AC007919, AL022394, AL133500,
AC006930, AC005690, AC006430, AC004972, AL031846, AC007344, AL031230, AC005412,
AC034420, AL035687, U96409, AL133245, AC005618, AL021393, Z86599, Z84488, AL008707,
AC003685, AC004686, AC005971, AL035415, AC008372, AC005071, AC002385, AC009516,
AC004955, AC004804, AC006137, AC005013, AC003041, U85198, L47234, AP000270,
AC007993, AL109983, AC002351, AC007012, AF199339, AC005486, AF030453, D88270,
AC007253, AC005006, AF129108, AC000056, AC004542, AC004820, AJ239322, Z83820,
AF093117, AL035420, AL021154, AC022517, AC005940, AC005088, AC005740, Z92542,
Z98946, AC000159, AC006084, AC004854, AC009802, AC003108, U91324, AC005900,
AC005294, AL031864, AC005094, AL021938, AL096747, AL109758, AC018633, AC005878,
AL109854, Z98200, AL049564, AP000220, AC004383, AL050325, AP000101, AF053356,
AC004934, AC000026, AC004253, AC005871, AC006487, AC005261, U91325, AC003689,
AL133312, AC003010, AC003691, AC004938, AC005184, Z82205, AP001053, AP000696,
AC009044, AL008719, AC002059, AF029308, AC002365, AC008041, AC002312, AP000084,
AC007240, AI022330, AC000097, AC003024, AL117330, AL031291, AC002543, AL008730,
Z94056, AC004167, AP000503, AC004025, AL049710, AC007055, AC002040, AL033521,

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| HMSLB94 | 3515 | 773812 | 1-317 | 15-331 | AC005546, AC004821, AC004583, AP001052, AF134726, AL022476, AL121769, AC007444, AP000032, AP000103, AC005484, AC005069, AC005671, AL049830, AC007225, AC007773, AC006120, AC006011, AP000117, AC007388, AC002988, AC002044, AF196972, Z99716, AC006387, AL109963, AC005159, Z68277, AL049589, AC006582, AL049561, AL121973, AC005206, AL031686, Z84466, AC003982, AC006323, AC004983, AL008583, and AC007938. |
| HMSME83 | 3516 | 950970 | 1-600 | 15-614 | AW193829. |
| HMSMF12 | 3517 | 948393 | 1-443 | 15-457 | |
| HMSMG02 | 3518 | 915179 | 1-369 | 15-383 | |
| HMSMH05 | 3519 | 931095 | 1-594 | 15-608 | |
| HMSMI12 | 3520 | 969636 | 1-610 | 15-624 | AI866580, AI133083, AA719073, AA469282, AA824484, AA425924, AA601674, AI114733, AI133552, AL109628, AC009247, AC005670, Z99716, AC005920, AC007917, AC005409, Z84487, AL022326, AL022163, AC004686, AF053356, AL031846, AC004922, AL133244, AC005527, AC007216, AC007055, AC004491, AC005940, AC006538, AC005562, AC005529, AC004703, AC004815, AC003663, AC006539, AF134726, AC007688, AC005225, AC005081, AC004991, AC006021, AC002425, AC002350, AP000503, Z98884, AI034343, AC007676, AC006312, U85195, AC007285, AC020663, AL022399, AC005632, AE000658, Z97056, AL135783, AL021939, D63861, AC005914, AC005288, AF001552, AL031311, AC005015, AC004897, AC004883, AC005057, AL049776, AF064858, Z83845, AC004990, AC006509, AC005829, AL035462, AC008072, AF129756, U62317, AC004760, AL079342, AC004552, AC002301, AL049591, AC004150, AC006071, AL022165, AC006077, AC005082, AL133448, AL109798, U96629, AL022329, AC002115, AP000501, AL121603, AC016025, U91323, AL023803, AC007227, AC005746, AL049636, AL035091, AC007226, AC007686, AL035400, AFI11168, AC005500, AC007685, AC005363, U95742, AL121653, AL031589, AC003037, AC002558, AL035681, AC004895, AL021808, AB003151, AL049830, Z93017, Z98742, AC005520, AF047825, AC006057, and AL024508. |
| HMSMK12 | 3521 | 841898 | 1-658 | 15-672 | R51068, H18491, AW378532, D34614, AC006208, and AL022322. |
| HMSMI27 | 3522 | 870008 | 1-344 | 15-358 | |
| HMSMN04 | 3523 | 926746 | 1-179 | 15-193 | |
| HMSMN23 | 3524 | 932548 | 1-708 | 15-722 | N80156. |
| HMSMQ05 | 3525 | 931022 | 1-98 | 15-112 | |
| HMSMV92 | 3526 | 934140 | 1-502 | 15-516 | |
| HMSMX68 | 3527 | 861333 | 1-412 | 15-426 | F04478, AA661921, AW438643, AA492081, F09626, AI002834, AI634384, AA584167, AA992351, D52587, F19070, AA782304, AA780944, AW193265, AW276827, AI688846, AL046409, AI619997, AA347368, AA577906, AI860013, AI345157, AI350211, AW193432, AA599920, AI289067, AI061334, AA623002, AI754658, AA873532, AL045808, AL046156, |

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| HMSNA44 | 3528 | 861293 | 1 - 615 | 15 - 629 | AI814735, AI744995, AI584186, AI375710, AI133164, AL135520, AI305766, AA757797, AW302903, AW083364, AI537955, AA634165, AA320113, AI341664, AL046266, AA719805, T51911, AA491831, AA621596, AA493695, AA350859, W45625, AA715355, AA664015, F00132, AA244208, AA568778, AC007314, X55932, U18390, L47228, X55929, AC005907, U18389, S77605, I51997, X54179, U18388, X55930, U57008, U18393, AD000684, X55925, U18395, U57006, U18392, U18391, S70692, X54180, U57007, AC007919, AC003005, X54175, AC006017, S70707, X55926, AF015157, X55927, AL023575, AL031668, U18396, AF015153, X53550, 769666, Z82215, AF015147, AL109617, X54177, AF015151, AC007304, AP000473, AL049776, X55931, L81654, AC009946, X54178, AL049642, AC004043, X54181, AC006449, AL033525, U67227, U67217, AC003957, U67231, U67230, AC004072, U67801, U67226, U67229, AC000100, AC008039, AC005783, AC004593, AL132800, AC008101, AI003147, U67211, AL023807, AC005696, AC006998, Z49816, AL031281, AL133321, AC005821, U67235, AL021937, AC002470, AF088035, AL137100, X88791, AP000855, AL080242, AC005548, U67234, U67222, AI008720, AL121934, U91322, AC002429, U67233, U67225, AC004691, Z83844, Z98200, AC007682, U67228, Z98172, AL080278, AC007687, AL035681, AL035458, AP000468, AL031291, AC003080, AP000328, AL049709, AC004047, AC002347, AC004848, L43392, AC007324, AL049871, AC004675, AC006120, AC007656, Z68869, AL023804, AC005288, AC004832, AC004816, AC002037, AC005209, AC006315, AC007664, AC008079, AC007193, AL035361, AF088219, AC005533, AL049712, AL109618, AC006312, AJ011932, Z97630, AL035249, U67216, AC005041, AL049829, AL031432, AC005553, AF123462, AP000144, and AL049766. |
| HMSNR30 | 3529 | 968716 | 1 - 622 | 15 - 636 | AI089800, AA830179, AA830184, AI798048, AW055247, AA913784, R62312, AI219663, R62313, AA164726, Z82243, AF107840, and AL049869. |
| HMSNR92 | 3530 | 861314 | 1 - 612 | 15 - 626 | H51736, and AA352806. |
| HMSNX38 | 3531 | 974321 | 1 - 585 | 15 - 599 | |
| HMSOA29 | 3532 | 953329 | 1 - 455 | 15 - 469 | AP000083, and AL049634. |
| HMSOA34 | 3533 | 936036 | 1 - 753 | 15 - 767 | |
| HMSOB43 | 3534 | 961779 | 1 - 321 | 15 - 335 | AC004706, AC000357, AC016025, AC016026, L78833, AF064863, and AL023575. |
| HMSOC76 | 3535 | 916807 | 1 - 238 | 15 - 252 | AA657671, and AI926886. |
| HMSOE03 | 3536 | 922858 | 1 - 401 | 15 - 415 | AL031133. |
| HMSOG57 | 3537 | 861298 | 1 - 541 | 15 - 555 | W04498. |
| HMSOM08 | 3538 | 958216 | 1 - 557 | 15 - 571 | AW157349. |
| HMSON02 | 3539 | 918397 | 1 - 436 | 15 - 450 | AA595739, and AL022476. |
| HMSON77 | 3540 | 861288 | 1 - 613 | 15 - 627 | T59270, AA484892, AA714073, AA857812, AA741301, AI279417, AI797998, AA728911, AI798242, AA326452, AI419337, AI361090, AI678581, AI421950, AA633565, AW303822, |

| HMSOO10 | 3541 | 963389 | 1 - 514 | 15 - 528 | AW026305, N75708, AA654535, AI859906, AI354602, AW247389, AW389929, AA830615, AA020882, AA348602, AA516247, AA664248, AI049955, T08386, AA767571, AI289050, AA339789, AI284092, T94072, AI143653, H02532, AA358258, AI359200, F17537, F30586, AI884861, AI123488, F03907, AA984763, AI024439, AA501461, AW192518, F10822, AW372037, AL044602, AI921619, AI362442, T05617, AI570805, W78056, AA831638, AA218874, N29930, R45579, AA453558, AA916430, AW069273, AI803741, AA745302, AA730795, AL118573, AI889426, AA828045, AA578905, AA632556, AI948984, R62772, AA878407, N55041, AI948959, AI584031, AW089625, AA662989, AA504872, AA598608, AI270647, AA487569, F25640, AF001552, AC005274, AL035684, AC006026, AL049872, AL034428, AJ003147, AC004024, AC007685, AC005088, AL109798, AL021407, AC004125, AC004832, Z73417, Z93023, AB023054, AC002287, Z98304, AC006064, AC006263, Z95331, AF095901, AF109907, Z84480, L44140, AF015416, Z98742, AC008372, AI035527, AC005972, AC007066, Z98949, AF030453, AL109827, AC005670, U47924, AC006468, AC000359, AC004882, AL034400, Z95115, AC005859, Z8599C, AF196971, AC006581, AC004491, AC005529, AC007656, AL133163, AC006449, AP000240, AP000065, AL021393, AC005291, AC006538, AP000221, U91321, AP000229, AL049759, AC004961, AC005300, AC005740, AC005193, AF196972, AL121825, AC004079, AC004106, AC005598, AI0223112, Z82206, AL049829, AP000008, AF111169, AL096791, AL035398, AC007917, Z68164, AL021155, AF064865, AC004055, AC007057, AC005765, AP000704, AC004890, AC005288, AL023876, AC005057, AC005327, AC005881, AC004876, AL049869, AC006211, AL022162, AL031053, AC007151, AD000812, AC007263, Z92542, AL031767, AL034548, AL022313, AC016027, AL009179, AL031311, AC003983, AL008630, AC005578, AC005048, AL035458, AL009181, AC005006, AC005209, AF165138, AF003626, AC002126, AL133371, AC005796, AL031228, AC004033, AC007193, AC002472, AP000031, AC005754, AC007664, AL096761, AC002530, AC004150, AC005940, AC005476, Z82176, AF001549, AC004025, AC007030, AC002538, AC012384, AC004408, AL031985, AC003101, AL035419, AC007450, AL022320, AC005538, AC007688, AJ251973, AL049839, AL049576, AC005081, AC005480, AC001234, AP000112, AP000044, AC007056, AL031284, AC003047, AC002116, AC004801, AC004993, AP001052, AL022315, Z93017, AC005815, AC006599, AL133485, AL031279, AC009330, AC004003, AP000272, AL031680, AP000518, AP000193, AC003071, AF060568, AC004895, AL008729, Z68269, AC005971, AP000050, AC007225, AC005015, AC007880, AC003982, AC009363, Z69366, AC005152, AP000493, AF111167, AC000394, AC004953, AC009247, AF067844, AP000045, AC006485, AP000117, AL035400, AC006130, AF038458, AL009051, AL049712, Z82203, AC007666, AL080245, AC005778, AC004887, AL109967, AL049734, AF053356, AC006466, AC004966, U96629, AC004687, AF117829, AC006160, AC006960, AC002425, AC005261, and AC007228. |
| | | | | | AL048361, and AC006950. |

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| HMSOP01 | 3542 | 915083 | 1 - 580 | 15 - 594 | AA020882, H64598, T60940, R78647, AI223968, AA487079, AA558487, T07225, AA515224, AC000059, AL079342, AL035079, AC003071, Z93020, AC005081, AC004655, AL035555, U80017, AL049776, AC005482, AP000704, AL021154, AL121754, AP000555, AC006536, AF179633, AF196971, AC009405, AL133245, AP000355, Z84469, AC002073, AP000350, AL031673, AC002395, AC006360, AF111168, AC005826, AL109809, AC004051, AC006121, AC003669, AC005873, AC005004, AF029308, U47924, AC005934, AL109620, AC006061, AL121757, AL049780, AC005369, AC006128, AL136295, AL031311, AL031257, AC005225, AL031985, AF130247, U40455, AC000066, AC007632, AC010205, AC004764, AC005399, AC007785, AC003051, and AC007091. |
| HMSOQ75 | 3543 | 959856 | 1 - 245 | 15 - 259 | |
| HMSOU16 | 3544 | 948198 | 1 - 631 | 15 - 645 | D59619, D80253, D80196, D51423, D59927, D80219, D80366, D80193, D59889, D80043, D80045, D80210, D80240, D80391, D51250, C15076, C75259, D80195, T03269, D80022, D81030, D80227, D50995, D59275, D58283, C14014, D80134, D80188, D80038, D59787, D51799, C14227, F13647, D80378, D81026, D59467, D80168, AA285331, D80949, T11051, D80212, D50979, C14429, D80164, D59502, D59695, D80166, D59859, D80269, D80248, AI910186, D58253, D80024, T11417, D57483, D59610, AW178893, D81111, D80241, D52291, C14331, AW177440, C14389, AW179328, D51060, AW178775, AW378532, AA305409, AI557751, AW377671, D51079, AI905856, AW352158, D51097, D80522, AW178762, AW177501, AW177511, AW360834, D80014, D51022, AW360811, AW352117, AA305578, AW360817, AW176467, AW378540, AW375405, D80251, AW366296, AW360844, AW375406, AW378534, D80064, AW179220, AW179332, AW377672, AW179023, AW178905, D80248, AW377676, AA514188, AW378539, AW352171, AW352170, AW177731, AW178907, AW179019, AW179024, AW177456, AA514186, AW177505, D80133, AW178906, AW360841, AW179020, AW178909, AW179329, AW178980, AW177733, AW378528, AW178968, AW178754, AW177018, C05695, AW352174, AW179004, AW178914, AW378525, AW367967, D80132, AW177728, AW178774, AW178911, AW378543, D80302, AW352163, AI557774, AW178983, AW352120, D80439, AW178781, D80247, T48593, D80258, AW177723, D51103, AW367950, D58101, T03116, AW378533, AA033512, C06015, D80157, D51759, AL048680, AW178986, D58246, D59503, AW177734, D45260, C14975, C03092, AW378542, H67854, H67866, Z17814, AA809122, AI535850, AJ525923, D80314, AI535959, AW360855, AI525917, D59317, AA514184, AI525920, AI533686, AI525227, AI525913, A67220, A25909, D26022, D34614, AR025207, Y17188, X68127, AB012117, A85396, AR066482, A85477, A62300, A86792, A62298, X67155, U87250, I19525, D89785, A78862, A44171, A84916, AJ132110, D88547, X93549, S69292, X82626, AR018138, I18371, AF135125, S78798, AR062871, I15997, AF058696, Y12724, AR037157, A80951, X92518, AR008430, AR008278, AR051191, AR064240, A20702, AR062872, AR017907, A43189, AR062873, A43188, A20700, AB028859, A84772, X89963, A84776, AR067731, AR067732, A58522, A91750, A84773, A84775, A84774, |

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| HMSOU92 | 3545 | 947760 | 1 - 521 | 15 - 535 | AR051190, A94995, AR023705, AR008443, A43601, I50126, I50132, I50128, I50133, X60736, A30438, AR066488, A26615, AR052274, A82595, AR016514, A45456, AR060138, Y09669, AR060385, AB002449, AR066487, A43192, A43190, AR038669, AR066490, D88507, I18367, A70867, D50010, AB012121, AB033111, Y17187, Z32749, A63261, X55486, AR008408, AR016691, AR016690, U46128, M60510, D13509, AR060133, A64136, A68321, AR000511, I14842, AR054175, U87247, AB023656, U79457, AF123263, AR032065, X93535, and AR008382. AA131030, and AA130991. |
| HMSOV17 | 3546 | 835834 | 1 - 701 | 15 - 715 | N70425, D59927, D59619, D80253, D80196, D80193, D51423, D80219, D80366, D80043, D51250, D80210, D59889, D80240, D80391, D80045, C15076, C75259, D50995, D80195, D59275, T03269, D81030, D80227, D58283, D80134, C14014, D80022, D59787, D80188, F13647, D80038, D51799, D81026, C14227, D59467, D80378, D80168, AA285331, T11051, D50979, D80949, D80212, C14429, D59502, D80164, W93336, D80166, D59695, D59859, D80268, D80269, H69709, D58253, AI910186, D80024, T11417, D57483, D59610, AW178893, D80241, D81111, C14331, C14389, D52291, AW177440, AI557751, D51060, AW179328, AW178775, AA305409, AW378532, AI905856, D51079, AW377671, AW352158, D51097, D80522, AW177501, AW177511, AW178762, D51022, AW360834, D80014, AW360811, AW352117, AA305578, AW375406, AW176467, AW375405, AW378540, D80251, D80064, AW366296, AW360844, AW360817, AW378534, AW179332, D80248, AW377672, AW179023, AW178905, AW179220, AA514188, AW378539, AW352171, AW352170, AW377676, AW177731, AW178907, AW179019, AW179024, AA514186, D80133, AW177456, AW177505, AW178906, AW360841, AW179020, AW178909, AW179329, AW178980, AW177733, AW378528, AW178908, AW178754, AW179018, C05695, AW352174, AW367967, AW179004, AW178914, AW378525, D80132, AW177728, D80302, AW178774, AW178911, AW378543, AW352163, T48593, AI557774, AW178983, D80439, AW352120, AA699681, AW178781, D80247, D80258, AW367950, AW177723, D80157, D51103, D58101, T03116, D51759, AA033512, AW378533, C06015, AL048680, AW178986, D58246, D59503, AW177734, D45260, R91284, C14975, C03092, H67854, AW378542, H67866, AA809122, AI535850, AI525923, AI535959, AW360855, AI525917, D59317, D80314, AA514184, AI525920, AI535686, A67220, A25909, D34614, D26022, AR025207, Y17188, X68127, AB012117, A85396, AR066482, U87250, A85477, A86792, A62300, A62298, X67155, I19525, A78862, A44171, D89785, A84916, AJ132110, D88547, S69292, X93549, I18371, X82626, AR018138, AF135125, AF058696, S78798, AR062871, I15997, AR037157, AR051191, A80951, X92518, AR008430, I68636, Y12724, A20702, AR062872, A43189, AR062873, A43188, A20700, AR008278, AR017907, AR064240, AR051190, A84772, AR067731, AR067732, A58522, A91750, A84773, A84775, A84774, AB028859, AR023705, X89963, A94995, AR060138, A45456, AR008443, A43601, I50126, I50132, I50128, I50133, X60736, AR066488, A45456, AR066488, Y09669, A26615, |

| HMSOW85 | 3547 | 827823 | 1 - 693 | 15 - 707 | |
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| | | | | | D59619, D80253, D59927, D80196, D80219, D51423, D80366, D59889, C75259, D59275, D80045, D50995, C15076, D80134, D80193, D59787, D80043, D80227, D80210, D80240, D80391, D51250, C14227, D80022, D80168, D80038, D80195, T03269, D81030, D58283, C14014, D80188, D51799, D81026, F13647, D59467, D80949, D80378, T11051, AA285331, D50979, D80212, C14429, D59502, D80164, D80166, D59695, D59859, D80269, D80268, D58253, AI910186, D80024, AI557751, T11417, D57483, D59610, AW178893, D80241, D81111, D52291, C14331, AW177440, C14389, D51022, D51060, AW179328, AW178775, AW369651, AA305409, AW378532, AI905856, D51079, AW377671, AW352158, D51097, D80522, AW178762, AW177501, AW177511, AW360834, D80014, AW352117, AW360811, AA305578, AW176467, AW375405, AW378540, D80251, AW366296, AW360844, AW360817, AW375406, AW179023, D80064, AW378534, AW179332, D80248, AW377672, AW178905, AW179220, AA514188, AW179019, AW378539, AW352171, AW377676, AW352170, AW177731, AW178907, AW179024, AA514186, D80133, AW177505, AW178906, AW360841, AW179020, AW178909, AW177456, AW179329, AW178980, AW177733, AW378528, AW178908, AW178754, AW179018, C05695, AI557774, AW352174, AW179004, AW178914, AW378525, D80132, AW367967, AW177728, D80302, AW178774, AW178911, AW378543, AW352163, AW178983, D80439, AW352120, AW178781, D80247, T48593, D80258, AW177723, D51103, T03116, D58101, AA033512, AW378533, C06015, AW367950, D80157, D51759, AL048680, AW178986, D58246, D59503, AW177734, D45260, AL043445, AL043423, AL038821, AL039085, AL039150, AL043441, AL039156, AL044530, AL039564, AL039538, AL039108, AL039386, AL039678, AL039074, AL038837, AL039625, AL039648, AL039629, AL037726, AL038531, Z99396, AL039109, AL040992, AL039924, AL039128, AL044407, AL036973, AL045337, AL037051, AL045353, AL036725, AL039423, AL039410, C14975, AL045341, AL039509, AL039566, AL039659, T23659, AL042909, H00072, D80314, T24119, AB011127, A67220, A25909, D34614, D26022, AR025207, Y17188, X68127, AB012117, A85396, AR066482, A85477, A86792, U87250, I19525, A62298, A62300, A44171, X67155, I68636, D89785, A78862, A84916, S69292, AJ132110, I18371, D88547, AR062871, S78798, AR037157, A80951, AR008430, X93549, A20702, AR062872, AR017907, A43189, AR062873, A43188, A20700, X82626, AR018138, X92518, I15997, A84772, AR067731, AR067732, A58522, A91750, A84776, A84773, A84774, AF135125, AR051191, AF058696, Y12724, AR008278, AB012121, AR064240, AR051190, A26615, AR052274, AB028859, AR023705, X89963, A94995, AR008443, A43601, X60736, I50126, I50132, I50128, I50133, AR066488, A82595, AR016514, |

| HMSOX47 | 3548 | 948202 | 1 - 742 | 15 - 756 | | |
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D80193, D59619, D80253, D80196, D80043, D51423, D80210, D59927, D80219, D80240,
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D80045, D80022, C75259, D80188, C14014, D50995, D80038, D51799, D59275, F13647, D80378,
D80134, AA285331, D81026, D59787, D59467, C14227, D80949, D80168, D80212, D50979,
C14429, T11051, D80164, D80166, D59502, D59859, D59695, D80269, D80268, D58253,
AI910186, D80024, D57483, T11417, D59610, AW178893, D80241, D81111, AW378532,
D52291, C14331, AW177440, C14389, D51060, AW179328, AA305409, AW352158,
AW377671, AI905856, D51079, D51097, AI557751, D80522, AW178762, AW177501,
AW177511, AW360834, D51022, D80014, AW378540, AW352117, AW360811, AA305578,
AW176467, AW375405, D80251, AW378539, AW366296, AW360844, AW360817, AW375406,
AW378534, AW179332, D80064, D80248, AW377672, AW179023, AW178905, AW179220,
AA514188, AW352171, AW352170, AW378528, AW377676, AW177731, AW178907,
AW179019, AW179024, AA514186, D80133, AW177505, AW178906, AW360841, AW179020,
AW178909, AW177456, AW177733, AW378525, AW179329, AW178980, AW178908,
AW178754, AW179018, AW352174, C05695, AW378543, AW179004, AW177728,
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AW352120, AW178781, D80247, T48593, D80258, AW177723, AW378533, AI557774, D51103,
T03116, AA033512, D58101, C06015, AW367950, D80157, D51759, AL048680, AW178986,
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AA809122, D80314, AI535850, AI525923, AI535959, AW360855, AI525917, D59317,
AA514184, AI525920, AI535686, AI525227, AI525235, AI525913, A67220, A25909, D34614,
D26022, Y17188, AR025207, X68127, A62300, A62298, X67155, AB012117, A85396,
AR066482, A85477, A86792, U87250, I19525, A78862, D89785, A84916, AJ132110, A44171,

X55486, AR060138, A45456, Y09669, A30438, AR060385, AB002449, AR066487, Y11458,
A43192, A43190, AR038669, AR066490, D88507, Z32749, I18367, D50010, AB033111, Y17187,
A02712, A70867, A63261, Y11449, S70644, Y11447, AR008408, A95051, AR016691, AR016690,
U46128, AR064706, I84553, I84554, M60510, A97211, A95117, A91754, AR031374, A49700,
AR031375, A58521, AR020969, A38214, X58217, I56772, I95540, AR018924, A63067, A51047,
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AR015960, AR000007, AR015961, AR061736, AF130655, X73004, AR060133, AF019720,
D14548, I19516, AB007195, A18053, I06859, A23334, A75888, I70384, A60111, A23633,
A23998, A58524, A58523, I00074, D44443, D88984, AR018970, A95052, A18050, AR007512,
AR036905, AJ244003, AJ244004, AJ244005, AR054723, A04441, A04442, A98767, A04447,
A04448, A93963, A93964, I63120, AR043602, AR043603, AR043601, I66495, I66494, I60241,
I60242, AR038762, I66486, I66487, A64136, A68321, AR000511, I14842, AR054175, U87247,
I66498, I66497, I66496, I12420, AR054109, AR023656, A97171, A97217, D61405, U79457,
AF123263, A64081, A24783, A24782, and AR032065.

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| HMSOY61 | 3549 | 836082 | 1 - 377 | 15 - 391 | D88547, X93549, X82626, AR018138, S69292, AF135125, AB010386, I18371, Y12724, AF058696, AR008278, AR051191, AR064240, S78798, AR062871, AB028859, A94995, I15997, AR037157, A80951, X92518, AR051190, AR008430, X89963, A20702, AR062872, AR017907, A43189, AR062873, A43188, A20700, A84772, AR023705, AR067731, AR067732, A58522, A91750, A84776, A84773, A84775, AR008443, A84774, A43601, X60736, I50126, I50132, I50128, I50133, AR066488, Y17187, A82595, AR016514, Y09669, AR060138, A45456, A26615, AR052274, AR060385, A30438, AB002449, AR066487, A43192, A43190, AR038669, AR066490, D88507, I18367, D50010, AB033111, Z32749, A70867, A63261, AR016691, AR016690, U46128, X55486, AR008408, AR054175, M60510, AB012121, D13509, AR060133, A64136, A68321, AR000511, I14842, U87247, AB023656, AR050680, U79457, AF123263, AR032065, X93535, and AR008382. |
| HMSOZ02 | 3550 | 918388 | 1 - 1147 | 15 - 1161 | AC005874, and AF134471. |
| HMSOZ19 | 3551 | 958680 | 1 - 276 | 15 - 290 | AA005234, AA131795, AI247788, AI247795, AA678394, H62467, H61493, AA131845, and AA242846. |
| HMSPA04 | 3552 | 922863 | 1 - 450 | 15 - 464 | |
| HMSPA09 | 3553 | 948209 | 1 - 315 | 15 - 329 | D80038, D81030, D80195, T03269, D80193, D59927, D51423, D59619, D80227, D80210, D51799, D80391, D80240, D80253, D58283, D80196, D80188, D80219, D80043, D80022, D80366, F13647, D59889, D51250, D59275, C15076, D80378, D80045, D80134, C14014, C75259, D50995, D80212, D80949, D81026, D59467, D59787, D80168, AA285331, C14227, C14429, D80164, D59502, D80166, D59695, D50979, D59859, D80268, D80269, D58253, T11051, AI910186, D80024, D57483, D59610, D81111, D80522, AW178893, D80241, T11417, C14331, D52291, AW177440, C14389, D51097, D51060, AW179328, AW378532, AW178775, D51079, AA305409, AW377671, AI905856, AW352158, D80014, AW178762, AW177501, AW177511, D51022, AW360834, AW352117, AW360811, AA305578, AW375405, AW378540, AW176467, AW377672, AW179220, D80251, AW378539, AW366296, AW360844, AW360817, AW375406, AW378534, D80248, AW179332, AW179023, AI557751, AW178905, D80064, AW177505, AA514188, AW352171, AW377676, AW352170, AW177731, AW178907, AW179019, AW179024, AW178906, AA514186, D80133, AW179020, AW360841, AW378528, AW178980, AW178909, AW177456, AW179329, AW352174, AW177733, AW178908, AW178754, AW179018, C05695, D80132, AW378525, AW367967, AW179004, AW178914, D80247, AW378543, AW177728, D80302, AW178781, T48593, D58101, AW177723, AW352163, D80258, AW178983, D80439, AW352120, AW178781, T48593, D58101, AW177723, AW378533, T03116, D51103, AA033512, C06015, AW367950, D80157, D51759, D58246, D59503, AW178986, AW177734, AI557774, AL048680, D45260, C14975, AW378542, C03092, H67854, H67866, AA809122, AI535850, AI525923, AW360855, AI535959, AI525917, D59317, D80314, AA514184, AI525920, AI535686, AI525227, AI525913, A67220, A25909, D34614, D26022, A62300, X67155, |

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| HMSPA41 | 3554 | 951971 | 1 - 626 | 15 - 640 | AR025207, A62298, Y17188, X68127, A78862, D89785, A84916, A85396, AB012117, AR066482, AJ132110, A85477, U87250, A86792, D88547, I19525, A44171, X93549, X82626, AR018138, AF135125, AF058696, Y12724, AR008278, AR064240, AB028859, S69292, A94995, I18371, AR008443, A43601, X89963, I50126, I50132, I50128, I50133, AR066488, AR062871, AR051191, A82595, S78798, AR016514, AR060138, A45456, Y09669, A26615, AR052274, AR066490, AR060385, A30438, I15997, AB002449, AR066487, AR037157, A43192, A43190, AR038669, A80951, I18367, X92518, AR051190, AR008430, D88507, X60736, D50010, A207202, AR062872, AR017907, A43189, AR062873, A43188, A20700, A84772, Y17187, A84776, A84773, A84775, A84774, AB033111, AR023705, Z32749, AR067731, AR067732, A58522, A91750, A70867, A63261, X55486, AR008408, AR016691, AR016690, U46128, M60510, D13509, AR060133, A64136, A68321, AR000511, AR054175, I14842, U87247, AR050680, AB023656, AF123263, U79457, AR032065, X93535, and AR008382. |
| HMSPB03 | 3555 | 922853 | 1 - 556 | 15 - 570 | AL133063. |
| HMSPB63 | 3556 | 861264 | 1 - 590 | 15 - 604 | |
| HMSPE92 | 3557 | 948104 | 1 - 545 | 15 - 559 | D59619, D80253, D59927, D80193, D80195, D80196, D51423, D80210, D80391, D80240, D80227, D80043, D58283, D80219, D81030, T03269, D80366, D51250, D80022, D59889, D80188, C15076, D80038, D51799, D80045, D59275, D80378, F13647, C75259, C14014, D50995, D80134, D81026, D59787, D59467, D80949, D50979, C14227, AA285331, D80168, D80212, C14429, T11051, D80164, D59695, D80166, D80269, D59859, D80268, D59502, D58253, AI910186, D80024, D57483, D59610, T11417, D81111, AW178893, D80241, D52291, C14331, C14389, AW177440, D51060, D51079, AA305409, AW179328, AW178775, AW369651, AW378532, AW377671, AI905856, AW352158, D51097, D80522, D80014, AW178762, AW177501, AW177511, D51022, AI557751, AW360834, AW352117, AW360811, AA305578, AW176467, AW378540, AW375405, D80251, D80064, D80248, AW366296, AW360844, AW360817, AW179220, AW375406, AA514188, AW378534, AW179332, AW377672, AW179023, AW178905, AW378539, AW352171, AW377676, AW352170, AW177731, AA514186, D80133, AW178907, AW179019, AW179024, AW177505, AW178906, AW360841, AW179020, AW178909, AW177456, AW179329, AW178980, C05695, AW177733, AW378528, AW178908, AW178754, AW179018, AW352174, D80132, AW179004, AW178914, AW378525, AW367967, D80302, D51103, AW177728, AW178774, AW178911, AW378543, AW352163, D80439, D80247, AW178983, D80258, AW352120, AW178781, T48593, AW177723, AI557774, D58101, T03116, C06015, AW378533, D80157, AA033512, AW367950, D51759, D58246, AL048680, AW178986, D59503, AW177734, D45260, C14975, C03092, H67854, H67866, AA809122, AW378542, AI525923, AI535850, AI535959, AW360855, AA514184, AI525917, C14973, D59317, D80314, D59474, AI525920, AI535686, D59551, AI525227, AI525235, AI525925, AC005280, A67220, A25909, D34614, D26022, AR025207, Y17188, A62298, |

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| HMVAJ53 | 3558 | 728009 | 1 - 388 | 15 - 402 | X67155, X68127, AB012117, A85396, AR066482, A85477, A86792, U87250, D89785, A78862, I19525, A84916, AJ132110, A44171, D88547, X93549, AR018138, X82626, AF135125, S69292, AF058696, I18371, AR008278, Y12724, AR064240, AB028859, AR051191, AR062871, S78798, I15997, A94995, X89963, AR037157, A80951, X92518, AR008443, AR051190, AR008430, A43601, A20702, AR062872, AR017907, A43189, AR062873, A43188, A20700, A84772, A84776, A84773, A84775, X60736, A84774, I50126, I50132, I50128, I50133, AR023705, AR067731, AR067732, A58522, A91750, AR066488, A82595, AR016514, AB002449, AR060138, A45456, Y09669, A26615, AR052274, AR060385, A30438, AR066487, AR066490, A43192, A43190, AR038669, D88507, I18367, D50010, AB033111, Y17187, Z32749, A70867, A63261, AR016691, AR016690, U46128, X55486, AR008408, M60510, D13509, AR060133, AR054175, A64136, A68321, AR000511, I14842, U87247, AB012121, AB023656, AR008277, AR008281, U79457, AF123263, AR032065, X93535, and AR008382. |
| HMVAL74 | 3559 | 684574 | 1 - 518 | 15 - 532 | AI504812, AF208502, L24051, and L12147. |
| HMVAT26 | 3560 | 789064 | 1 - 689 | 15 - 703 | AF150282, AI276243, AW090199, AI022691, AI249193, and AI033035. |
| HMVAW08 | 3561 | 962197 | 1 - 280 | 15 - 294 | AI580823, AA993162, AI472918, AI368750, AI453823, AA747678, AA888560, AW242191, AI350319, AA211927, AA725398, AA917463, AA742371, AA732102, AI218576, AI129408, AI474325, AA594345, AI310062, AI560613, AA056507, AA747426, AA905372, AI216359, AA405612, AA884092, AA879006, AI820689, AI150838, T32650, D20227, AA666388, R36652, AI372931, AI149128, AI963448, AA115748, AI290638, AW009341, AA524305, N32841, AI460321, AW076026, T24776, AA858246, T63577, AW118055, W31629, AW265569, AA676598, T63502, A85117, and AC005192. |
| HMVAY55 | 3562 | 574215 | 1 - 228 | 15 - 242 | AI130740, AI131523, and AW016460. |
| HMVBA36 | 3563 | 698060 | 1 - 528 | 15 - 542 | |
| HMVBD70 | 3564 | 735696 | 1 - 549 | 15 - 563 | |
| HMVBD84 | 3565 | 782910 | 1 - 333 | 15 - 347 | Z58983. |
| HMVBO01 | 3566 | 916072 | 1 - 665 | 15 - 679 | AA416619, AA416601, D20128, AI368157, T49382, AI805024, AA600863, AA368659, AI572680, AW407679, AA984891, AA287823, H53109, AW407007, AA338474, AW021674, AA600127, AA804187, AA598497, AI281622, T57096, AA814748, AA658083, AA362439, N55296, AA846046, AA640563, AI567676, AA598579, H48017, AI745666, AA526665, F31670, AA055647, AA315052, AW243817, AW022796, AA548921, H47461, N21434, AI571094, AA353957, H52795, AI520984, AA587835, C14724, AA602664, AA364147, AA493546, AA126969, AA362440, T06339, AI679759, AA338238, AA457777, AW105463, AW273201, AW273146, AW392414, AA666195, AA143703, T15454, AI801479, AA668727, AA460880, AA604149, AI825901, AA831913, AA230221, AA665532, AA827490, F23221, AW162314, AA807704, AW162332, AI538404, AL036536, AI150934, AI221027, AI002863, AW439224, AA559208, AA338237, AI547110, N57782, AA488689, AA086042, AI031759, AI340941, |

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| HMVBO34 | 3567 | 1 - 1157 | 15 - 1171 | AI498153, AC005578, AC004893, AL109758, AC005088, and AF030453. |
| HMVBU26 | 3568 | 1 - 516 | 15 - 530 | W48568. |
| HMVBV30 | 3569 | 1 - 516 | 15 - 530 | W16683. |
| HMVBW94 | 3570 | 1 - 200 | 15 - 214 | |

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|---|---|---|---|---|
| HMVCG47 | 3571 | 719936 | 1 - 398 | 15 - 412 | |
| HMVCO55 | 3572 | 868146 | 1 - 224 | 15 - 238 | |
| HMVCR47 | 3573 | 661425 | 1 - 452 | 15 - 466 | |
| HMVCT75 | 3574 | 715950 | 1 - 363 | 15 - 377 | AL119355, AW392670, U46350, AL119319, AL119484, AL119319, AL119497, AL119439, AL119335, AL119324, AL119457, Z99396, U46349, AL119483, AL119443, U46347, AL119522, AW372827, AW363220, AW384394, U46351, AL119444, AL119418, U46346, U46341, A81671, AR066494, AR060234, AR054110, and AB026436. |
| HMVCX10 | 3575 | 963828 | 1 - 461 | 15 - 475 | N99112, AW452701, AA428994, and AA766700. |
| HMVCY46 | 3576 | 662311 | 1 - 359 | 15 - 373 | AP000496. |
| HMVCZ64 | 3577 | 767714 | 1 - 350 | 15 - 364 | AA323534. |
| HMVDA11 | 3578 | 861185 | 1 - 330 | 15 - 344 | AB033030. |
| HMVDA30 | 3579 | 691608 | 1 - 306 | 15 - 320 | |
| HMVDF10 | 3580 | 970480 | 1 - 348 | 15 - 362 | AA306716, AI272308, N46300, AA533231, and AL122098. |
| HMVDF66 | 3581 | 915638 | 1 - 139 | 15 - 153 | AA129862. |
| HMVDF83 | 3582 | 701907 | 1 - 344 | 15 - 358 | |
| HMVDG76 | 3583 | 861179 | 1 - 409 | 15 - 423 | |
| HMVDH06 | 3584 | 934778 | 1 - 113 | 15 - 127 | |
| HMVDI38 | 3585 | 709243 | 1 - 769 | 15 - 783 | N71412, W00789, N99736, T90278, N73838, and AL096710. |
| HMVDJ75 | 3586 | 710475 | 1 - 543 | 15 - 557 | AL034384. |
| HMVDR49 | 3587 | 722581 | 1 - 367 | 15 - 381 | AL034562. |
| HMVDT07 | 3588 | 952488 | 1 - 703 | 15 - 717 | W38609. |
| HMVDU16 | 3589 | 904807 | 1 - 1328 | 15 - 1342 | R89846, H61529, R89885, AA203599, H57092, AI567351, AI571551, AI919345, AI701074, AI590530, AI612759, AW103893, AI828731, AI554427, AI921248, AW082040, AI824557, AI745713, AI868831, AI569616, AI224992, AI475451, AI872711, AI476046, AW102785, AI249323, AI273142, AI281779, AW148320, AI950664, AI891157, AI682841, AI917055, AI433976, AI918655, AI269696, AW059837, AI590999, AI690312, AI632033, AI648663, AW103371, AI888953, AI520931, AI872545, AI873644, AI926790, AI640379, AI561299, AI697304, AW002342, AL079963, AW148716, AL036361, AI590120, AW088134, AI687065, AI923768, AI628292, AI867042, AI801325, AI335449, AI862144, AI289937, AL040243, AI251830, AI887151, AI636719, AI539153, AA640779, AI866608, AI886124, AW238730, AI612920, AI364788, AI633419, AI445165, AW082060, AW162071, AI815855, AW302988, AI269862, AI572676, AW161579, AL038445, AI610645, AI863477, AI800453, AL036403, AI680498, AW129202, AA613907, AI498579, AI866002, AI623396, AI696612, AI274508, AI284509, AI499285, AA508692, AI890833, AI805638, AW150578, AI564719, AI952360, AL045266, AI889376, AW403717, AI524671, AI249257, AI521012, AW051258, AI254251, AW132056, AI619502, AI571909, AI677796, AI802542, AI702433, AI591316, AI922901, |

AI569583, AI799199, AI284131, AL036146, AI886753, AI366549, AW026882, AL041772,
AI783504, AI963068, AI620284, AW243820, AW268220, AL119863, AI909642, AI554245,
AL036274, AI250369, AI343059, AI433157, AI702073, AW023590, AW051107, AW088793,
AA494167, AI500523, AI349933, AI591074, AI537677, AW071177, AI362637, AI497733,
AI857296, AI287489, AI500039, AI476109, AL036214, AL036396, AA287231, AL038605,
AI439087, AI349645, AI349004, AI499920, AI874351, AI955917, AI862139, AI682720,
AL119791, AI282326, AW079159, AI609059, AI500662, AI921420, AW008048, AI673710,
AI590761, AI648684, AI251876, AW301409, AI811845, AL043326, AI499381, AI590645,
AI889839, AI500077, AL038565, AI284517, AI500706, AI280747, AI678443, AW130776,
AI612843, AI491852, AW169653, AI312428, AI281772, AW304497, AI925196, AW169671,
AI539771, AI340627, AI340582, AI800433, AI431424, AI816010, AI539711, AW193134,
AW071417, AI284020, AA427700, AI632408, AI680165, AW149227, AL045500, AI690480,
AI680388, AI572787, AI564247, AI282281, AL036759, AI242249, AW075351, D50977,
AI925156, AI539808, AL036802, AI589267, AW195968, AW068845, AI633308, AI469119,
AI630747, AI869367, AI475947, AI784252, AW087445, AI468872, AI608936, AI336575,
AW075413, AW088903, AA225339, AI885974, AI282504, AI439717, AI308035, AI433384,
AI538085, I48979, I48978, I89947, A08916, A08913, AL050393, A93016, I89931, I49625,
AFI13676, S78214, AF090934, AFI18070, AL137527, A08910, AL133093, AF090903,
AL133640, AL050149, AL050116, AFI13019, AL110221, AL050108, E07108, AL137557,
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AL133565, AL133606, AL117585, E03348, AFI13689, AL137459, AR059958, AF158248,
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AL049314, AF017152, AL080137, U72620, AF091084, AL122123, AFI13677, Y11254,
AFI13691, U00763, U42766, U91329, AL049452, AFI11851, AI238278, AL133557, AFI13694,
A58524, AF017437, A58523, AFI77401, AL049938, AL117583, AJ242859, AL117460,
AF090900, AF125948, L31396, AL110225, AL117394, AL122093, L31397, X96540, E07361,
AL137283, AL050277, I03321, AFI18094, AL137463, AL137538, AL050138, AL049300,
AL133113, AL049382, AF183393, AL117435, AL049430, I42402, Z82022, AL137648, A77033,
A77035, AL137271, AL080127, U80742, A03736, AI2297, I09360, I33392, AF097996, X70685,
X93495, U35846, X72889, X65873, AF061943, AL122110, U67958, AL080159, AF087943,
X98834, AL110197, AL133014, A08912, AL137521, AL049283, AL133072, AL133568,
AF067728, AR038969, E15569, AL050172, AL137523, E08263, E08264, I26207, AL137560,
AL133077, AJ012755, AFI11112, AF026124, I17767, A93350, AFI19337, AL122049, AR000496,
U39656, S61953, AL133104, Y09972, AF026816, AL137556, Y14314, AL122111, E08631,

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| HMVDW09 | 3590 | 625070 | 1 - 307 | 15 - 321 | M30514, AF153205, AF003737, AL133098, AL110280, AL080074, A07647, AF057300, AF057299, AL137526, AF162270, U96683, A45787, AL117440, AF185576, AL137476, AL133067, AF106827, AR038854, AF000145, Z72491, I00734, E04233, AF079763, E00617, E00717, E00778, E02221, X87582, L30117, Y07905, A90832, U68387, AR054984, AR013797, AL137273, AL117432, AJ006417, E05822, U58996, AF210052, AF051325, AL049465, X92070, A08911, AF111849, Z37987, AL137480, AF081197, L19437, AL137533, U78525, AF008439, AC006371, I66342, AL122118, X83508, AF100781, AF132676, AF061836, AL137705, AL080086, AF095901, U49908, E06743, AF061573, AL137478, AL137292, U87620, and I41145. |
| HMVDZ70 | 3591 | 878247 | 1 - 1205 | 15 - 1219 | AW003291, AA927510, AA552415, AA210860, AW295775, AW450098, H14682, AW451140, AW450099, AA768028, AA323759, AA325907, R18955, AA588782, AA326001, AA736511, AA045961, AA768029, AW294299, R43963, AI923497, AI204450, AI609388, AI766770, AW075933, R50434, AA045960, T99804, AA325957, AW028853, R50435, AA573803, AW388521, H58575, AA190436, AW388475, AA299925, AI673040, AA534412, T99909, AI798620, AI743143, AI745610, AW167112, AI952808, AI751485, AA609752, AI743323, AL137509, and AF207550. |
| HMVEA91 | 3592 | 774609 | 1 - 210 | 15 - 224 | T93923, AA693730, AA693709, and AA780005. |
| HMVEF33 | 3593 | 701908 | 1 - 325 | 15 - 339 | |
| HMVEH72 | 3594 | 750931 | 1 - 292 | 15 - 306 | U69274. |
| HMWBE16 | 3595 | 527509 | 1 - 243 | 15 - 257 | |
| HMWBG29 | 3596 | 890878 | 1 - 251 | 15 - 265 | AL049844. |
| HMWB147 | 3597 | 527593 | 1 - 328 | 15 - 342 | AW405398. |
| HMWBK07 | 3598 | 954098 | 1 - 43 | 15 - 57 | |
| HMWBK24 | 3599 | 524357 | 1 - 204 | 15 - 218 | AA630672, AA487621, AA579179, AA127426, AW148507, AAI27426, AW270343, AA618452, AA299189, AA101689, AW085855, AI382825, AA080866, AI459245, AA410788, AL037554, H53828, AI056177, H96467, AA018283, AW179306, AI434695, R31790, AA553720, AA522642, AW341869, AI733856, AW439555, AA493136, AA114077, AA487888, AI343864, AA828062, AA572713, AA320966, AI421755, AA610219, AA297666, AP000556, AP000557, AL121652, AC006511, AC005037, AC005548, AL021407, AC000085, AC007707, AL034402, AL080243, AC006539, AC009464, AC007270, Z98752, AC006313, AL034549, AP000042, AP000110, AC007671, AC006050, AL022320, AC008079, AC002468, AC004815, AI022476, AC007057, AL031670, AL020995, AC008038, AC011504, AC007193, AP000359, AL031666, AC005058, AC011311, Z99716, AF029308, AC006210, AF111169, AC005971, AC002310, AC007055, AC004890, AC005011, AC006012, AL008725, AC004823, Z97352, AC012627, AL049761, AC004205, U66059, AC000025, AL117355, AC008072, AC004030, AL050318, AC004686, AP000226, AL031311, AC007242, AC008014, AF196779, AC005369, AC005158, AC004894, AC005565, AL110292, Z98048, AL031589, AC004263, AC004148, AC005484, |

| | | | | | Accession Numbers |
|---|---|---|---|---|---|
| HMWBM09 | 3600 | 967687 | 1 - 381 | 15 - 395 | AC007688, AL132992, AP000432, AL109627, AC005900, Z85996, AC004966, AC004593, AC004028, AC009516, AC005581, AP000558, AC005796, AC005527, AC005632, AC003109, AC005412, AC002395, U95742, AC004020, AL049653, AC004386, AC005972, U95739, AC006277, Z97181, AL023755, AL021155, AL050308, AC010722, AC005844, AP000512, AP000511, AC006040, U91326, Z97056, U78027, AL079295, AC005529, AF117829, AC007565, AF134726, Z83826, AC004478, AL031577, AC006211, AC000364, AC005863, AP000087, AC002425, AC008040, AC003029, AC002492, AF141309, Z94056, AC007919, AC005839, AC007425, AC005243, AL035252, Z97054, Z93017, AL050341, AP000009, AL008718, U91318, AL109967, AC020663, AC005031, AC005291, Z78022, AL133245, AL022146, AC004073, AC006023, AC013248, AC006130, AC006576, AC007773, AL033397, AC004388, AC002558, AC004230, AC008101, AP000555, Z84483, AC004999, AC003003, AL022329, AC006285, AC016831, Z84469, AC004381, AL008582, AC006271, AC005730, AC005081, AL121694, AL121825, AC002115, and AL121654. |
| HMWBN56 | 3601 | 745698 | 1 - 442 | 15 - 456 | AL121534, H05681, T09309, N36636, AA853335, AA216518, AA188847, AA404726, AF151803, and AL049839. |
| HMWBO07 | 3602 | 839560 | 1 - 490 | 15 - 504 | AA025913, H26505, AW080056, AA122271, AA495850, AA078104, AB011110, and AC004084. |
| HMWBR86 | 3603 | 731650 | 1 - 337 | 15 - 351 | |
| HMWBV45 | 3604 | 861152 | 1 - 349 | 15 - 363 | |
| HMWCG29 | 3605 | 723779 | 1 - 212 | 15 - 226 | AA350169, AA207226, AL039395, AA359708, AA371441, T84879, AA019568, AA307901, R35023, R59278, AA371174, AA359314, AA359967, and AL050286. |
| HMWCQ09 | 3606 | 924634 | 1 - 534 | 15 - 548 | AI583448, AI252010, AI252880, N40760, AA601674, AA129746, H94878, AA533054, AA550850, AA207152, AA564479, AA084230, AI654305, AA602906, AC000353, AL132712, AC005567, Z84487, AC005500, AC005737, Z84469, AC007731, AC004033, AL031255, AC005500, AC005531, AL008718, AL035603, AC005659, AC007199, AL050306, AP000355, AC007686, AL049539, D87675, AC002069, AL035659, Z98200, AL008718, AC008167, AC008127, AC004263, AL035405, AC006359, AC006006, AC005049, AC005740, AC005049, AC003667, AC005952, Z82190, AP000314, AC006006, AC005919, AC005899, AL035071, L47234, U91322, AL133246, AC005535, AC003070, AB003151, AL031685, Z99716, Z99943, AC005048, AC005233, AC002395, AC004851, AC004912, AL078595, AC007766, AL049709, AL031311, AL133485, Z93096, AC006111, U91321, AC007919, AC005399, AL109984, AF001550, AC002302, AF001548, AC000085, AL121652, AC005387, AC004583, AL008582, AC006112, AC005284, AL139054, AL110505, AL031447, AL049778, AL080243, AC008115, AC004234, U91326, AL008630, AC006075, AF132033, AC006958, AF160252, AC007773, AC005596, AL022163, AC006011, AP000194, AC002455, AC006160, and AC005237. |
| HMWCQ58 | 3607 | 738372 | 1 - 585 | 15 - 599 | AA814994. |

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|---|---|---|---|---|---|
| HMWCV08 | 3608 | 960083 | 1 - 287 | 15 - 301 | R71737, AA904211, AI537108, AI354333, AA775188, AI754066, AI554405, AI690497, R39329, AA604495, AA373107, AA598605, AA362791, AA372669, AI049630, AW054936, AC005225, AC006064, AP000688, Z99716, AC006241, AC005839, U91323, AF024533, AC005971, AC005920, AC007666, AC007793, Z93783, AC000052, AC002312, Z83845, AC006211, AC006449, AC005666, AC004019, AC004491, AL008637, AC004983, AF036581, AC005696, AF064090, AC005516, AL121658, AC005229, AJ003147, AL049829, U91321, AF134726, AF102137, AC000134, AF222686, AL109865, AC006312, AL049636, AC004526, AP000553, AF108459, L44140, AF111169, AL049830, AC004030, AL050348, AC004975, AL121694, AC004851, AL078593, AC008040, AC002350, AC002565, AC004814, AL049394, AF200465, AF053356, AL021939, AC005924, AL031279, AC006057, AC007488, AC005015, Z98200, AL035071, AC004771, AC004531, AF196779, U89335, AL022326, AL035086, AI023807, AL049776, AL031659, AL031311, AL031053, AC005911, AC004890, AC005787, AF045555, AC002470, AL049709, AL121782, AP000104, AC007938, AC005527, AC007225, Z49258, AL031597, AL033538, AC005899, AL049538, AL022313, AL132712, AB023048, AL031291, AL136295, AC005288, AL136168, AC007393, AC004874, AC005228, AC004929, AC006552, AC007707, AL135746, and AL031283. |
| HMWCX60 | 3609 | 531395 | 1 - 294 | 15 - 308 | |
| HMWDD54 | 3610 | 932261 | 1 - 598 | 15 - 612 | |
| HMWDD75 | 3611 | 800023 | 1 - 304 | 15 - 318 | AI809080, AA379813, AI924837, AI609008, AI492061, AI080471, AA860342, AW273457, AA723182, AW170759, U46317, AI693837, R68374, AA579485, AI809655, AA173648, AI280048, AA173958, AA903598, AA187926, AI674623, AA653977, AA182901, F31240, AB020860, L46722, and U21855. |
| HMWDF88 | 3612 | 906769 | 1 - 349 | 15 - 363 | H94922, R78249, AA448990, R14119, and N47060. |
| HMWDH23 | 3613 | 676216 | 1 - 397 | 15 - 411 | |
| HMWDL52 | 3614 | 921603 | 1 - 368 | 15 - 382 | AI248959, AI969858, AA210772, AI935498, AI023405, AW139513, AI914255, and AF161349. |
| HMWDQ83 | 3615 | 558021 | 1 - 331 | 15 - 345 | M86156, AI383528, AI648449, AA708182, AW149204, AI565505, AI569929, AA830935, AF136415, AI915216, AW025607, AA635323, AI269112, AI301909, AI808701, AW275607, AI268340, N86439, AC004692, AC004389, AL022150, AF022141, AJ229041, AC008372, AC005164, AC006957, Z70272, AC004103, AC004217, AL049710, AL080273, AL031585, AL050311, Z83745, X63690, AJ006997, AL096770, AC009308, AC005900, AC011422, AL035563, AC005532, AL049834, AC000060, AL021026, AC006152, AL133247, AL022154, AC005191, AC000113, AC006384, Z96074, AL122127, AF121782, AC006972, AC005376, AL049734, AF064857, AC007656, AC009399, AL136297, AL020989, AL118497, AC004506, AL049563, AL118503, Z97055, AL121657, AC009399, AC005537, AC006153, AL031965, L42098, U85195, AL136130, AC002368, AF121899, AC005022, AP000161, AP000019, Z98052, AL023582, AC002366, AL050308, AE000658, AC005023, AC004963, AC000065, AL022401, AL008633, AP000855, AC004981, AF001905, AC006083, |

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| HMWDW60 | 3616 | 712083 | 1 - 302 | 15 - 316 | AP000949, AL080277, Z98755, AL049647, AC006600, AL031121, Z82211, AC005245, AL021307, AC005483, AC006054, AC004941, AL049871, AC007563, AC006928, AC005393, Z95328, AF130247, AC005162, AC005993, AL049767, AC004843, Z98948, AC004384, AC004066, Z47556, AL022157, AF165138, Z84476, AL133512, AC007102, AC005915, AC002526, AF114156, AC010169, AL132708, AC006151, AC005536, AL035467, AC003013, AC005701, AP001067, AL121595, AL109759, AL035079, AC009501, AC005201, AF003627, Z82212, AL096704, AC003084, Z49918, AC006257, AC007567, AP000965, AP000459, AC005036, AC000029, AL121576, AF172277, AL031230, AF201337, AL035451, AJ011930, AC004993, AL031116, AC010382, AC005509, AL121838, AP000150, AC004038, AC007934, AF117829, AC005337, AC005999, AP000009, AL030998, AC010200, AC005070, AC003683, AC009479, AC006369, AC007298, Z82975, AC002545, AP000457, AL034403, AC004677, AL049549, AC004551, AP000704, D87010, Z83820, AL022577, Z83848, AL110505, AL008728, AC006976, AC009286, AF070718, AC006149, AP000022, AC007564, AF003528, D87009, AC008071, AF118808, AC002492, AC007128, AP000163, and AC004020. |
| HMWDY93 | 3617 | 573513 | 1 - 371 | 15 - 385 | AL137658, and AC005343. |
| HMWDZ73 | 3618 | 573754 | 1 - 221 | 15 - 235 | |
| HMWDZ77 | 3619 | 573494 | 1 - 237 | 15 - 251 | AA552576. |
| HMWEE04 | 3620 | 709334 | 1 - 312 | 15 - 326 | AA158500, H50330, H43516, Z44332, Z60555, and Z65232. |
| HMWEG24 | 3621 | 781017 | 1 - 561 | 15 - 575 | AI760719. |
| HMWEJ73 | 3622 | 767384 | 1 - 360 | 15 - 374 | AW328173, AW152205, AW385309, AA279517, AI167428, AA452524, W65387, AI745322, T63422, AI826716, AI978981, AI818495, W61291, AA828979, AW410086, AA098876, AA364030, AA773566, AA093538, AA098877, AA886992, AJ007398, AC007226, and AC007371. |
| HMWEK11 | 3623 | 967362 | 1 - 925 | 15 - 939 | Z46095, AA458817, AA601434, AA340097, AA364315, AL008729, AC004510, AC004791, Z85986, AL022400, AL135783, AL049797, AC003101, and AP000962. |
| HMWEK39 | 3624 | 573604 | 1 - 235 | 15 - 249 | AJ224170, AJ224166, AJ224169, AJ224168, and AJ224167. |
| HMWEM85 | 3625 | 783973 | 1 - 376 | 15 - 390 | AA913138, AA423926, AA913371, AI223267, AI313130, AW451350, AW402718, AA825964, AA831628, AA954510, AA915296, AA813817, L44288, AW450780, AI470126, AW241985, AW117223, AI080479, AW169986, AA482277, AA482179, W07615, AA535546, AA469966, N50150, H92386, R88465, AI080018, and H02524. |
| HMWEP07 | 3626 | 953749 | 1 - 806 | 15 - 820 | AA026434, AA026362, AW371765, and AB002340. |
| HMWES31 | 3627 | 861129 | 1 - 303 | 15 - 317 | |
| HMWFC21 | 3628 | 752826 | 1 - 363 | 15 - 377 | AC002398. |
| HMWFE01 | 3629 | 9171S0 | 1 - 122 | 15 - 136 | |

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| HMWFH47 | 3630 | 738220 | 1 - 473 | 15 - 487 | T86765, AA355300, AA262872, AA313285, W39312, AA373610, AA314442, AW327419, N28311, W26959, AW246991, AA147465, AI193121, AA143349, T85873, AA026924, W02364, AA355802, AW160522, W02991, H11880, C04326, N28909, AW162940, AA112862, AA147394, AW190189, AI369463, AW246218, AA079419, AA156348, and AF132959. |
| HMWFI54 | 3631 | 573598 | 1 - 262 | 15 - 276 | |
| HMWFO10 | 3632 | 954979 | 1 - 177 | 15 - 191 | |
| HMWFP33 | 3633 | 702618 | 1 - 200 | 15 - 214 | AC002454, and AL118497. |
| HMWFP60 | 3634 | 576880 | 1 - 443 | 15 - 457 | H71678, AA568314, AW419389, AI889696, AA602906, AI613389, AW151824, AA593501, AI271762, AA622801, AA502207, N73060, AA610433, AI791475, AL042373, AA152404, AW237905, AW023111, AI251429, AW117740, AA708678, AW177869, AA644090, F17700, AA747757, AA347969, AA077776, AI187148, AC005726, AC004750, AC004647, AC005046, AC002120, AL031670, AP000115, AC005412, Z94056, AL050348, AC005015, Z83844, AC006130, AC007263, U91323, AP000501, AF207550, AC005004, AC006006, AC005039, AL121603, AL109628, AC007240, AP000694, AF126403, AL049830, AC004975, AC003982, AL031283, AL049712, AC004832, AP000047, AC005695, AC000118, Z95115, AC006449, AC006146, AC005081, AP001056, AC007199, Z98742, AL096701, AL139054, AL096774, AC005209, AL132712, AL049569, AC005625, AC004139, AL035443, AC005696, AC005391, AC007845, AC007151, AL109627, Z84488, AP000305, AC002425, AC007934, U91326, AC005730, AC006487, AF108083, AL035681, AL031657, AC016025, AC004622, AC002347, AC004583, AP000120, AF109907, AL031281, AC003070, AL031846, AC007450, AC003108, AC006120, Z95152, AC002470, AC006271, AC005736, AC007686, Z83838, AL031591, AC007687, AC004858, AC005971, AC002059, AC002365, AC006050, Z82180, AC007114, AL121658, AL031587, AL135783, L78810, Z83826, AC007283, AF196969, AC004966, AP001051, AC006530, AC020663, AL133163, Z84466, AC005291, AC006388, AJ246003, AC006101, AL035400, AP000556, AL133246, AL021393, AC005486, AC005193, AL034423, AC000025, AC008012, AC005684, AC005251, AC004887, Z85987, Z93241, AL031597, AP000167, AP000052, AC003043, AL109984, AP000552, AL024498, AC002302, AP000553, AC005220, AF038458, AD000091, AC007052, Z97181, AC004841, AC007993, AP000503, Z85986, AC005969, AC006960, AL035683, AP000555, AC005972, AL031295, D88268, U62293, AC005778, AC005531, AF129756, L44140, AC003688, AC005057, AC005529, Z98752, AC004509, AC004253, AL049757, AC006236, AC005666, AC005057, AB020864, Z83840, U95742, AL022237, AC005940, AC003037, AC004765, AL049694, AC007546, AC006430, AC004601, Z98036, AC004791, AL021155, U91322, AB020866, AL009181, AL034582, AL022302, AC002375, AC005003, AC004813, AL121652, AC005943, Z84480, and AC005839. |
| HMWFQ91 | 3635 | 573551 | 1 - 251 | 15 - 265 | AA453990, and AI696031. |
| HMWFR11 | 3636 | 967371 | 1 - 113 | 15 - 127 | AL022318. |
| HMWFU05 | 3637 | 861119 | 1 - 319 | 15 - 333 | |

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|---|---|---|---|---|---|
| HMWFU85 | 3638 | 659578 | 1 - 658 | 15 - 672 | AA476558, AI744905, and AI035977. |
| HMWFW75 | 3639 | 727236 | 1 - 225 | 15 - 239 | AC004878, AC006014, AC006480, AC005488, and AC005071. |
| HMWGC08 | 3640 | 959838 | 1 - 500 | 15 - 514 | |
| HMWGF22 | 3641 | 861104 | 1 - 351 | 15 - 365 | |
| HMWGG55 | 3642 | 920575 | 1 - 313 | 15 - 327 | C16083, AR031682, and AR050617. |
| HMWGK95 | 3643 | 576885 | 1 - 362 | 15 - 376 | |
| HMWGQ80 | 3644 | 575822 | 1 - 537 | 15 - 551 | R69751, R70467, H80879, H80878, H69771, AJ011930, AL049835, Z95126, Z94277, Z84481, AL023279, AL022152, AC002071, AC010186, AC005303, AC004985, AL008706, AL034545, AC004825, AL035466, AC006007, and AL023579. |
| HMWGT07 | 3645 | 953454 | 1 - 946 | 15 - 960 | AA292171, AI194002, AI291200, AA702786, AA935514, AW149691, AW134516, AI570407, N52183, AI470179, AI301560, AI565962, AI263083, AA442075, AI262533, AI953743, AI992355, AA725905, AI458151, AI057281, AI350058, AT765586, AI300345, AI147626, N22467, AW083096, AI304886, AI818816, AI298938, N31044, AA442178, AA251570, AA411536, AI917092, AI984370, AI200607, AW241665, AW270856, AI298116, AI948774, AI693857, AI337892, AI216845, W92870, W35349, AW275375, R64446, AW340470, F09033, W92747, AI215812, R56870, AA854471, W32863, R63834, AI340931, AA573328, AA251002, R26470, R28480, H39705, AA737193, AA737108, H61908, and AI348059. |
| HMWGU64 | 3646 | 823460 | 1 - 415 | 15 - 429 | AI872915. |
| HMWGV63 | 3647 | 576854 | 1 - 224 | 15 - 238 | AW449350. |
| HMWGX38 | 3648 | 709249 | 1 - 395 | 15 - 409 | |
| HMWGX50 | 3649 | 959293 | 1 - 1759 | 15 - 1773 | AI823360, N76186, AW444682, AA199658, AI090198, AI374757, N64773, AI769715, N53704, W49490, AI026060, AI801785, AA061099, W49491, AI190947, AI287331, AI742199, AI769707, AI219372, R72390, R63399, R69629, R69723, AA064629, H18928, W73451, D20803, AA527475, AI187711, AI472100, W73390, H19367, AA064753, R63455, and AI093177. |
| HMWHA91 | 3650 | 684346 | 1 - 315 | 15 - 329 | |
| HMWHB03 | 3651 | 861108 | 1 - 371 | 15 - 385 | AA654781, AI754544, R73754, AW080185, AA584125, AA531580, R08918, AA845209, AA487726, AW081194, AA633762, AL037910, AW341978, AC004690, AC019014, AL080248, U78045, AC007981, AC006120, AC000556, U41069, AC004854, AL133238, AC008062, AL021978, AL022336, AP000556, AC004805, AC005377, AC009721, AF109907, AC008018, X92412, AL021579, AL031659, AC006343, AC005144, AL022312, AC006130, U85195, AC006006, AC003102, AL035464, AC012330, AE000658, AC006146, U52112, AL022313, AL049872, AC004590, AC008132, AC008079, AC004531, Y14768, AC005887, AF129756, AC005871, AP000550, AC005752, AL032821, AC004859, AL121591, AP000557, AL034548, AC005175, AC000381, AC007421, AP000505, AC005800, AL021154, AL136295, AC004752, AC000094, AC007546, U85196, AC003663, AC007325, X69516, AP000240, Y15994, AC003950, |

| Clone ID | No. | Col | Region 1 | Region 2 | Public Accession Numbers |
|---|---|---|---|---|---|
| HMWHF58 | 3652 | 584538 | 1 - 424 | 15 - 438 | AL035417, AC004966, AI008723, AC008115, AC005043, AC006459, AC005353, Z77249, AL009172, AC004993, AD000813, AL049765, AC004033, and AC006478. AI763355, AI911988, AW271204, AI419935, AW196356, AA831500, AA705874, AI609777, AI632367, AA825907, AI247514, AA897761, AA029912, AW088307, AA059231, AA883186, N72988, Z40302, W03289, H82082, W57671, H61166, AW264318, F01458, AI270229, AI932770, AW070350, F04303, AI318375, H93492, AI304462, AI304550, AI270299, R93209, AW369598, and R07861. |
| HMWHM30 | 3653 | 676413 | 1 - 320 | 15 - 334 | AP000333, and AP000173. |
| HMWHN70 | 3654 | 851334 | 1 - 342 | 15 - 356 | R19936, AI653255, AI261658, W78776, T85433, AA309754, H16895, AA132626, AA216686, AI636091, AA160797, AA312101, T69055, T35768, and AI347190. |
| HMWHS25 | 3655 | 678166 | 1 - 323 | 15 - 337 | AL031685. |
| HMWHZ50 | 3656 | 724431 | 1 - 496 | 15 - 510 | AC006427. |
| HMWIA18 | 3657 | 424132 | 1 - 342 | 15 - 356 | AA011418, AI264860, and AA699615. |
| HMWIF10 | 3658 | 964707 | 1 - 441 | 15 - 455 | AA056297, H86332, H81699, AA021646, AA828136, AA252828, AW366161, AW366143, AW366126, AW366153, AW366129, and AB032976. |
| HMWIL67 | 3659 | 791275 | 1 - 771 | 15 - 785 | AW236288, AF045555, and AC005081. |
| HMWIM26 | 3660 | 681845 | 1 - 300 | 15 - 314 | AB011167. |
| HMWIQ47 | 3661 | 653198 | 1 - 364 | 15 - 378 | AI160190, AA226732, AA232883, AA232882, AA948725, AI079958, AA767922, AI467979, W39443, U83194, and AF121856. |
| HMWIS96 | 3662 | 746475 | 1 - 680 | 15 - 694 | AA203110, AA465513, T96285, AI682937, and AA337698. |
| HMWIT95 | 3663 | 793450 | 1 - 422 | 15 - 436 | AC004913. |
| HMWIU48 | 3664 | 917690 | 1 - 437 | 15 - 451 | AA939053. |
| HMWIV48 | 3665 | 795649 | 1 - 364 | 15 - 378 | AB011085. |
| HMWIX21 | 3666 | 670972 | 1 - 201 | 15 - 215 | T24065. |
| HMWIZ03 | 3667 | 924227 | 1 - 283 | 15 - 297 | AA300776, AA341396, AJ225022, and AF030428. |
| HMWJB29 | 3668 | 668700 | 1 - 342 | 15 - 356 | |
| HMWJC76 | 3669 | 688926 | 1 - 393 | 15 - 407 | |
| HMWJF10 | 3670 | 964705 | 1 - 339 | 15 - 353 | |
| HMWJG85 | 3671 | 918724 | 1 - 509 | 15 - 523 | AA102161, T68018, N86357, and AF144757. |
| HMWJH15 | 3672 | 757807 | 1 - 211 | 15 - 225 | |
| HMXAA03 | 3673 | 964494 | 1 - 60 | 15 - 74 | N24413, and AA325761. |
| HMXAA08 | 3674 | 959267 | 1 - 213 | 15 - 227 | R16911, AI023774, AC005509, AL135960, and AJ131016. |
| HMXAA39 | 3675 | 670501 | 1 - 212 | 15 - 226 | AI766637. |
| HMXAA56 | 3676 | 733331 | 1 - 42 | 15 - 56 | |
| HMXAB21 | 3677 | 714384 | 1 - 122 | 15 - 136 | AI908994, AI908999, AI909070, AI909069, N34111, AI908998, AA365524, AA143042, |

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|---|---|---|---|---|---|
| HMXAB69 | 3678 | 661849 | 1 - 136 | 15 - 150 | AI908887, AA365526, AI909065, H69944, AI909066, AI908986, W37554, AA291887, AI909072, AL049386, and AL133036. |
| HMXAC70 | 3679 | 964492 | 1 - 138 | 15 - 152 | AL024509. |
| HMXAC83 | 3680 | 780385 | 1 - 105 | 15 - 119 | M85519, and AC005625. |
| HNEAB76 | 3681 | 674781 | 1 - 242 | 15 - 256 | AC004620. |
| HNEAC51 | 3682 | 523767 | 1 - 422 | 15 - 436 | AA701643, and AI033306. |
| HNEAJ21 | 3683 | 671370 | 1 - 341 | 15 - 355 | |
| HNEAJ57 | 3684 | 735083 | 1 - 341 | 15 - 355 | AW000777, and AL031005. |
| HNEAK41 | 3685 | 711557 | 1 - 227 | 15 - 241 | |
| HNEAN61 | 3686 | 507302 | 1 - 200 | 15 - 214 | |
| HNEAN85 | 3687 | 524222 | 1 - 384 | 15 - 398 | AI709236, AI219619, F18454, and AC005531. |
| HNEBI66 | 3688 | 529168 | 1 - 249 | 15 - 263 | |
| HNEBJ08 | 3689 | 958742 | 1 - 899 | 15 - 913 | AI914747, AI371165, AI149061, AI869786, AI537814, AI111171, AC002302, AC005666, AL109798, AC004841, AC004938, AC004217, AL020097, AC004383, AF001549, AL035460, AC007216, AP000501, AC005529, AP000505, Y14768, AC004159, U62293, AL022165, U63721, Z95115, Z97630, AL049631, Z85996, Z84469, AC009516, AC000353, AC005057, AL133485, AC004634, Z84466, AC005911, AF129756, AP000049, AC007686, AC004817, AC004887, AC005332, AC006211, AP000311, U91323, AL049569, AC007057, AC005531, AC002115, AC002301, U95742, Z95152, AC005520, AC004491, AC000026, AC005355, AC004230, AL023807, AL034548, Z73359, AL031311, AP000689, AL031657, AC002059, Z95116, AC008044, AC007993, AP001065, AC004876, AC005581, AC005102, AL022721, AC005071, AC008018, AC005765, AF121781, AC005781, AL035414, AP000215, AL022326, Z97056, AP000350, AL035685, AC004985, Z97053, AC005871, AC004000, L78810, AC005005, AC006101, AC005803, AL049699, AL022163, AB003151, AC004765, AC002425, AL109984, AC004020, Z98051, AC009247, AC005585, AL035659, AL096763, AC004966, AC004685, AL049872, AC008372, AC004750, L44140, AC005527, D87675, AC007384, AC002430, AC002544, AP001052, AC002369, AC004832, AP000039, AP000107, AC005280, AL022323, AC002073, AC006450, AL133163, Z99128, AL031650, AC005620, AL023575, AC004228, AC004991, Z98750, AC006538, AP000047, AL096791, AL021393, AC002299, AC005722, AL132987, AC005815, AC005037, AF107885, AP000498, AC003982, AC005200, AC005777, AC007421, AC005261, AC005086, AC004656, AL034417, AC002477, AC006057, AL049856, AL008721, AC002551, L78833, and AC005952. |
| HNEBJ35 | 3690 | 529576 | 1 - 303 | 15 - 317 | |
| HNEBJ48 | 3691 | 919274 | 1 - 515 | 15 - 529 | |
| HNEBM07 | 3692 | 954173 | 1 - 637 | 15 - 651 | |

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|---|---|---|---|---|
| HNEBY19 | 3693 | 1 - 341 | 15 - 355 | |
| HNEBY26 | 3694 | 1 - 318 | 15 - 332 | |
| HNEBY30 | 3695 | 1 - 316 | 15 - 330 | AA047509, AA649294, AA743885, and AA714682. |
| HNEBY32 | 3696 | 1 - 392 | 15 - 406 | AI902200. |
| HNEBY34 | 3697 | 1 - 483 | 15 - 497 | |
| HNEBY44 | 3698 | 1 - 422 | 15 - 436 | |
| HNEBY46 | 3699 | 1 - 395 | 15 - 409 | AC006006. |
| HNEBY48 | 3700 | 1 - 308 | 15 - 322 | AL021977. |
| HNEBY71 | 3701 | 1 - 245 | 15 - 259 | |
| HNECD65 | 3702 | 1 - 511 | 15 - 525 | |
| HNECE07 | 3703 | 1 - 370 | 15 - 384 | AI017707, AI733633, and AC006001. |
| HNECE14 | 3704 | 1 - 94 | 15 - 108 | |
| HNECF59 | 3705 | 1 - 102 | 15 - 116 | |
| HNECF76 | 3706 | 1 - 326 | 15 - 340 | |
| HNECI57 | 3707 | 1 - 165 | 15 - 179 | |
| HNECK47 | 3708 | 1 - 331 | 15 - 345 | |
| HNECK66 | 3709 | 1 - 374 | 15 - 388 | AC002073. |
| HNECK67 | 3710 | 1 - 398 | 15 - 412 | AA836909. |
| HNECK83 | 3711 | 1 - 684 | 15 - 698 | |
| HNECL71 | 3712 | 1 - 221 | 15 - 235 | |
| HNECM64 | 3713 | 1 - 289 | 15 - 303 | T79573, AA525832, AA381390, AI207738, AA503018, AL039801, T79503, AA601713, AI862790, AA319995, AA856945, AA381962, AI434365, H23540, AA223512, AA297145, AA629852, AA765678, AA487892, AA829576, Z84487, AL050348, AJ229041, AL136295, AL133312, AC002302, AL022336, AC004638, AC004098, AC005005, AC004910, AC005030, Z93016, AC004526, AC003003, AL031680, AC002389, AC005037, AC002378, AC007226, AC006160, AL031668, AL121655, AL008583, AL031602, AL035071, AL121658, AC002390, AC000159, AC005378, U73023, AC002350, AP000511, AC000403, AC001231, AL121653, AC004882, AL050307, AB023051, U47924, AL009181, AC005212, Z82208, AF196969, AC005102, AC006509, AC007537, AC004212, AC006064, AF015720, AC006512, AP000512, AC004922, AL031281, U52112, AL022396, AL031230, AC007159, AC005859, AL034553, AC007308, AC005874, AF134471, AC004865, AC002470, AC007283, AC002544, AC004985, AC000113, AC006030, AC005529, AC012083, L48038, AC005225, AC007731, AC005500, AL031432, AC007868, AC007690, AC005332, AC005089, AL024507, AC006449, AP000504, AF129756, AC004382, AC005344, AL022238, AC004448, AC005399, AC006065, AC002375, AC006262, AD000812, U91326, AD001527, AF111168, AB003151, AC006681, AC004491, AL049636, AC004694, AC006084, Z73417, AC005881, AC011311, U80017, AC005386, |

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|---|---|---|---|---|---|
| HNECO69 | 3714 | 861068 | 1 - 154 | 15 - 168 | AF091512, AC006059, AC004148, AC003982, AL024498, Z83844, AJ003147, AC000026, AL008719, Z93023, AC005912, AL096701, AC005071, Z68164, AC007276, AC006088, AL008715, AC005244, AL022476, AL049869, and AL049712. AC004974. |
| HNECR93 | 3715 | 529868 | 1 - 287 | 15 - 301 | |
| HNECS77 | 3716 | 527511 | 1 - 487 | 15 - 501 | AI907658, and AW176803. |
| HNECT70 | 3717 | 958356 | 1 - 289 | 15 - 303 | |
| HNECV31 | 3718 | 466977 | 1 - 290 | 15 - 304 | |
| HNECV66 | 3719 | 575633 | 1 - 322 | 15 - 336 | |
| HNECW09 | 3720 | 968378 | 1 - 482 | 15 - 496 | AC004034, and AC004235. |
| HNECW20 | 3721 | 527508 | 1 - 493 | 15 - 507 | AC008928. |
| HNECW35 | 3722 | 855430 | 1 - 409 | 15 - 423 | AW407366, and AA278963. |
| HNECX77 | 3723 | 507305 | 1 - 350 | 15 - 364 | W60940, AF019563, and AD000833. |
| HNEDD27 | 3724 | 527589 | 1 - 377 | 15 - 391 | AC004797. |
| HNEDD80 | 3725 | 507186 | 1 - 399 | 15 - 413 | AI692616, AL080276, AC004829, AL021921, and U95738. |
| HNEDD90 | 3726 | 789187 | 1 - 351 | 15 - 365 | |
| HNEDE48 | 3727 | 721895 | 1 - 265 | 15 - 279 | |
| HNEDE59 | 3728 | 527060 | 1 - 264 | 15 - 278 | |
| HNEDF71 | 3729 | 572390 | 1 - 120 | 15 - 134 | |
| HNEDG11 | 3730 | 967643 | 1 - 243 | 15 - 257 | AD000864. |
| HNEDG35 | 3731 | 790570 | 1 - 540 | 15 - 554 | |
| HNEDG56 | 3732 | 746708 | 1 - 325 | 15 - 339 | |
| HNEDH54 | 3733 | 527505 | 1 - 318 | 15 - 332 | |
| HNEDH96 | 3734 | 697747 | 1 - 678 | 15 - 692 | |
| HNEDI80 | 3735 | 573138 | 1 - 353 | 15 - 367 | AC005306. |
| HNEDK04 | 3736 | 923910 | 1 - 139 | 15 - 153 | AA299540, AC000159, and AB007864. |
| HNEDK16 | 3737 | 702570 | 1 - 433 | 15 - 447 | AA299540, AW363833, AC000159, and AB007864. |
| HNEDK22 | 3738 | 527503 | 1 - 365 | 15 - 379 | |
| HNEDK74 | 3739 | 765880 | 1 - 225 | 15 - 239 | |
| HNEDN42 | 3740 | 527499 | 1 - 179 | 15 - 193 | AC005222. |
| HNEDO95 | 3741 | 573136 | 1 - 258 | 15 - 272 | |
| HNEDQ51 | 3742 | 527816 | 1 - 321 | 15 - 335 | |
| HNEDQ68 | 3743 | 586485 | 1 - 1038 | 15 - 1052 | AA525825, AA868356, AW105002, and AW022273. |
| HNEDR48 | 3744 | 683470 | 1 - 153 | 15 - 167 | |
| HNEDS03 | 3745 | 925091 | 1 - 113 | 15 - 127 | |
| HNEDS18 | 3746 | 954586 | 1 - 140 | 15 - 154 | |

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| HNEDS29 | 3747 | 703032 | 1 - 221 | 15 - 235 | |
| HNEDU0I | 3748 | 909832 | 1 - 403 | 15 - 417 | |
| HNEEA41 | 3749 | 868102 | 1 - 264 | 15 - 278 | |
| HNEEB62 | 3750 | 573185 | 1 - 441 | 15 - 455 | AL133037. |
| HNEEB84 | 3751 | 781940 | 1 - 211 | 15 - 225 | |
| HNEEC81 | 3752 | 844318 | 1 - 352 | 15 - 366 | AL031729. |
| HNEED12 | 3753 | 893698 | 1 - 583 | 15 - 597 | AI284640, AI246796, AI133164, AI434695, AI564185, AI431303, AL119984, AI334443, AI286356, AI053672, AI471481, AI754955, AW408717, AA720702, AA488746, AA491814, AI587583, AI587565, AA602557, AL119691, AI300167, AL041706, AW162049, AW301350, AI929531, AI499938, AI281881, AW303196, AW440299, AW274349, AL079645, AI537955, AI569086, AL041146, AI919265, AI037897, AA171941, AI753037, AI064864, W79504, AI366902, AW008317, AI064729, AA680243, AI192631, AL038842, AA177061, AI371070, AL046898, AA713815, AI633025, AL138455, AW419262, AA579063, AI282336, C75026, AW021583, F36273, AA587256, AI446464, AA502155, AI761471, AI732120, AA632648, AA226153, AI674873, AI469172, AI148277, AI339850, AW270270, AW238278, AI251021, AI334435, AF150152, AI962050, AI143242, AA758934, C75034, AI707788, AI610159, AA507547, AW022379, AW168342, AA362573, AL138265, AI679782, AW272758, AI871722, C06303, AW023270, AA610491, AI432270, AL048925, AW162489, AI919029, AW079135, AL120687, AA714453, AA559290, AI567674, AI079910, AI270476, AA581903, AW007759, AL038474, AL120959, AW273218, AA386111, AA302963, M77858, AI434311, AL045053, AI830390, AA177063, AI801701, AI654525, AL039958, AI928898, AI110760, AI754653, AA708678, AW073470, AA631507, AL046205, AA569387, AI358571, AI367975, AI473943, AC005994, AC005393, AC009516, AC005940, AC005358, AC006263, AC007227, AL031311, AC005529, AC006277, AC006241, L44140, AC003003, AC005666, AC004491, AC007999, AL135744, AL033392, AP000961, AC005231, AC005778, AC006536, AL133448, AP000501, AL132994, AC005799, AL022323, AL035494, AL008721, AP000152, AL049843, AF196779, AL008718, D84394, AC004472, AC005105, AC006088, AC002429, AL132777, AC004596, AC005046, AC008039, AC005701, AF196969, AL117258, AL008582, AC004992, AL023581, AC005695, AC004492, AC005387, AC002126, AC005154, AC005971, AF067844, AC002996, AC006285, AL096707, AP000049, AC005562, AC003681, AC005740, AL031770, AC002404, AL049539, AP000311, AC005839, AL080274, AC002312, AL049776, AL021391, AC005180, AF001550, AC005914, AC000047, AL022322, AL021453, AL031597, AC005696, AC008125, AL132987, AC004158, AP000555, AC005244, AL109628, AC016025, AC006449, AC005212, AC004650, AC003101, AC007066, AC031650, Z69666, AC004386, Z97054, AC002425, AL031668, AC006017, AC020663, AP000509, AP000049, AC004825, AC006048, AC008044, AC006120, AC004690, AC005531, AC005828, AC005828, AC003085, AC006138, AC004263, AL031848, AC008055, AC004253, U85195, U91326, AL133512, AC006128, AC006128, AC004652, AC005412, AC007649, |

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| HNEED48 | 3754 | 668747 | 1 - 563 | 15 - 577 | AL034418, AC007564, AC007068, AC002094, AL022476, AC002418, AL035411, AC005899, AC002350, AL035410, AL022328, AC007226, AD000092, Y18000, AC005702, AC004453, AC005632, AL021808, AE000658, AC002430, AL049872, AP000114, AP000046, AF001549, AL031673, AL121825, AB020865, AL050318, AF029308, AC007664, AC004987, AJ003147, AC002115, AC007384, AL034549, AC000025, AL139054, Z99716, AP000692, AC004945, AL096701, AJ006997, D87675, AF091512, AC000041, AC008119, AC005969, AJ011930, AC002470, U62293, AC006057, Z97195, AC008056, AC006111, Z83844, AC006312, AL035681, AC004638, AL035460, AL035458, AC006515, AC006511, AC006480, AP000513, AC007731, AL022722, AC005500, AL021578, AC005081, AC007308, AL031295, AC008062, AC005069, AC003007, AC005678, AJ246003, AC004975, AL078477, AC005057, AC005207, AC006050, AC004990, AC006509, AC005209, AC005255, AC010168, AL049745, AC007182, AB001523, AL020997, AC004590, Z98200, AL122020, AC006928, AC006064, AL121603, AC005988, U95090, AL009029, AP000962, AC004686, AC005829, AC006153, AC004815, AC012627, Z74739, AP000550, Z97630, AC004024, AC004047, Y14768, U78027, AC004859, AC005031, AL022238, AL079333, AC010382, AC004217, AC004745, AC006292, AC005037, AC007363, AF109907, AL035659, AL031257, AC009069, AC005089, AL133243, AF129756, and AC002369. |
| HNFAA13 | 3755 | 667712 | 1 - 460 | 15 - 474 | W26285, H51850, R00469, and AC004782. |
| HNFAA80 | 3756 | 781578 | 1 - 398 | 15 - 412 | |
| HNFAA83 | 3757 | 530295 | 1 - 299 | 15 - 313 | |
| HNFAD95 | 3758 | 784714 | 1 - 726 | 15 - 740 | H83668, H85578, AA054359, H86619, AA013002, and Z82244. |
| HNFAE07 | 3759 | 861069 | 1 - 347 | 15 - 361 | |
| HNFAF40 | 3760 | 861021 | 1 - 305 | 15 - 319 | |
| HNFAG69 | 3761 | 530349 | 1 - 163 | 15 - 177 | |
| HNFAH45 | 3762 | 662053 | 1 - 370 | 15 - 384 | |
| HNFBS51 | 3763 | 530064 | 1 - 206 | 15 - 220 | |
| HNFBT11 | 3764 | 967784 | 1 - 218 | 15 - 232 | C05828, AW363343, C05733, W48575, AA581240, AI299442, AI871940, AA121886, AI869406, AI133355, AI133609, AA360082, AI015119, N32218, AA669165, AI282488, AA209438, AI611960, AI583255, AI886467, AA883595, C05928, AA601356, AC006057, AC005318, AC008015, AL133243, AL096703, AC005179, AC005666, AC007919, AC007066, AL049697, AC002044, AC007016, AC002094, AC007385, AC007051, AP000306, AC004019, AC005622, AL035067, AC005484, AC005291, AC004963, AF217403, AC002126, AC005251, AC002357, AL034548, AC006571, AC004755, Z97876, AL031123, Z84488, AL117339, AC004447, AC008372, AC002565, AP000047, AC004659, AC006011, AC005409, AC005412, AC006479, AC004049, AP000557, AC005838, U91328, U95742, AP000115, AC005003, AL049749, AC005231, AL035405, AC009399, AC003071, AC003072, AL109952, AC004913, AC004655, AF047825, AC005358, AC007308, AC004382, AL031075, AL031120, |

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| HNFBU53 | 3765 | 1 - 347 | 15 - 361 | AC005104, Z98257, AC004924, AC004099, AC005913, AC007367, AR036572, AC006120, AC004582, AP000359, AC005095, AC005911, AC007376, AL109827, AC002287, AC005803, AC004854, AP000501, AC006511, AL022726, AC003049, AC004517, AC005829, U96629, AC005255, AL022315, Z83732, AC004929, AC004622, D84394, AC007216, AC009247, AC003065, AC004837, AL117338, and AF053356. |
| HNFCI32 | 3766 | 1 - 124 | 15 - 138 | |
| HNFCI41 | 3767 | 1 - 723 | 15 - 737 | AC004126. |
| HNFCI77 | 3768 | 1 - 428 | 15 - 442 | F15202, AA297666, AA621381, AA715814, AI244157, AC002468, AJ006997, AC004099, AC007774, AL024507, AL034417, AL049829, AP000194, AC005844, AC006241, AL133245, AC004953, AL133246, AC005730, AC004019, AL121652, AC006387, AC007934, AC006441, U85195, Z98304, AE000658, AL133244, AC002456, AL139054, AL022323, AL035420, AP000116, AC000052, AC004531, AC004967, AC005231, AL020997, AC005668, AC002365, AP000313, U91326, Z83844, AP000117, AC007055, AP000050, AL096701, AC004453, AC004209, AL109984, AC007227, AC005037, AL031228, AC006371, AC004383, AL031186, AP000689, AC004626, U91323, AF134726, AC005264, U96629, AB003151, AF196779, Z82198, AC005914, AC004686, and AP000501. |
| HNFCL68 | 3769 | 1 - 108 | 15 - 122 | AL022098. |
| HNFCS04 | 3770 | 1 - 405 | 15 - 419 | AA743885, AA714682, AA748749, AA047509, AA969497, and AA649294. |
| HNFCT27 | 3771 | 1 - 397 | 15 - 411 | AL079300. |
| HNFCT67 | 3772 | 1 - 217 | 15 - 231 | |
| HNFCW14 | 3773 | 1 - 367 | 15 - 381 | AC002091. |
| HNFCY33 | 3774 | 1 - 485 | 15 - 499 | |
| HNFDC21 | 3775 | 1 - 298 | 15 - 312 | |
| HNFDC91 | 3776 | 1 - 503 | 15 - 517 | |
| HNFDJ17 | 3777 | 1 - 451 | 15 - 465 | H67844, and AL031282. |
| HNFDK40 | 3778 | 1 - 475 | 15 - 489 | AC006441. |
| HNFDN04 | 3779 | 1 - 450 | 15 - 464 | N24949, and N21519. |
| HNFDN41 | 3780 | 1 - 375 | 15 - 389 | Z98884. |
| HNFDN89 | 3781 | 1 - 173 | 15 - 187 | AC006285, AC007845, and AC016025. |
| HNFDO81 | 3782 | 1 - 256 | 15 - 270 | |
| HNFDO84 | 3783 | 1 - 425 | 15 - 439 | AA651846, AA287087, AC007193, AL008721, AC007228, and AC007283. |
| HNFDP09 | 3784 | 1 - 374 | 15 - 388 | AC007308, AP000557, AP000556, and AC004983. |
| HNFDR35 | 3785 | 1 - 208 | 15 - 222 | AL008729. |
| HNFDR83 | 3786 | 1 - 264 | 15 - 278 | |
| HNFDV41 | 3787 | 1 - 407 | 15 - 421 | |

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| HNFED22 | 3788 | 537334 | 1-103 | 15-117 | AI692459, AW025274, AI912748, AI625788, AW135287, AI268722, AW137005, AI983277, AW235753, AD000864, and AC002133. |
| HNFED43 | 3789 | 583458 | 1-703 | 15-717 | |
| HNFEF43 | 3790 | 424792 | 1-331 | 15-345 | AA248418, AA009955, R98152, AA031428, AA592915, AI732656, AI904111, AC002485, AC004897, AL021786, AC004935, AC004015, AC003682, AL035089, AC006145, AC008168, AC005533, AC008014, AC002357, AL049613, Z68331, AP000403, AL031782, AL035424, AL049734, and AC005378. |
| HNFEF83 | 3791 | 850982 | 1-502 | 15-516 | |
| HNFEF95 | 3792 | 971171 | 1-814 | 15-828 | |
| HNFEG09 | 3793 | 526641 | 1-265 | 15-279 | |
| HNFEG31 | 3794 | 934595 | 1-384 | 15-398 | AA490873. |
| HNFEH12 | 3795 | 825406 | 1-134 | 15-148 | AF196970, and AF115549. |
| HNFEI12 | 3796 | 518245 | 1-95 | 15-109 | |
| HNFEK33 | 3797 | 957396 | 1-516 | 15-530 | |
| HNFEM76 | 3798 | 860967 | 1-426 | 15-440 | AW340916, AA766845, L81825, and AC004749. |
| HNFEM86 | 3799 | 537336 | 1-234 | 15-248 | |
| HNFEN20 | 3800 | 669916 | 1-463 | 15-477 | |
| HNFEO61 | 3801 | 530355 | 1-232 | 15-246 | AA777291, AI476328, AC004409, AC004825, AC004081, Z98742, AC004207, AP000515, and AB014083. |
| HNFER89 | 3802 | 787086 | 1-361 | 15-375 | |
| HNFES44 | 3803 | 860920 | 1-350 | 15-364 | |
| HNFEU62 | 3804 | 574398 | 1-74 | 15-88 | AC004914. |
| HNFEV41 | 3805 | 575549 | 1-207 | 15-221 | AI954737. |
| HNFEV66 | 3806 | 575552 | 1-99 | 15-113 | |
| HNFFB21 | 3807 | 671263 | 1-425 | 15-439 | |
| HNFFC21 | 3808 | 574693 | 1-401 | 15-415 | |
| HNFFD88 | 3809 | 577422 | 1-331 | 15-345 | |
| HNFFF81 | 3810 | 574678 | 1-55 | 15-69 | |
| HNFFG79 | 3811 | 781693 | 1-178 | 15-192 | |
| HNFFH03 | 3812 | 921923 | 1-461 | 15-475 | R23542, H24230, R14460, Z42321, and H24229. |
| HNFFH04 | 3813 | 574679 | 1-266 | 15-280 | |
| HNFFJ48 | 3814 | 860311 | 1-379 | 15-393 | AL043721, F24284, AL043756, AI561335, AI880168, AI697353, AA715270, W25284, AI865905, AL120008, T62712, AW169397, AL133723, AI914706, AA669416, AW238278, AI305547, AI307201, T11542, AA548137, AI473090, R65801, AI371070, AI138344, AW055226, AW088846, AA019707, AW238016, AI205181, AL118991, AA669961, AI082510, AI291823, AI312790, AI039809, AI336054, AI689385, AI355587, AA580662, AW327961, AW327960, |

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| HNFFK15 | 3815 | 920748 | 1 - 194 | 15 - 208 | AI445436, AI926846, H13868, AP000402, AC007284, AP000159, AC004066, AC005972, AL035072, AC007228, AL049872, X87344, AC006251, AC005772, AC000358, AL008636, AC005968, AC005295, AC003003, AP000330, AL024474, AL109628, AC005304, AC003046, AC007043, AC007057, AP000244, AL117338, AL035494, AL049591, AC007298, AL121757, AP000697, AC007012, AF003626, AC004664, AC002456, AC006001, AC007370, AL022322, AP000173, AC004695, AC005751, AC007076, AC002523, AL050305, AI133289, AF001549, AC003962, AC005146, AC008055, AI035659, AC007656, AC008080, AC004499, AC006458, AC005599, U62317, AC005846, AC008125, AC002368, AC004976, AL035695, Z82194, AC007738, L78810, AC004021, AC008498, AC004626, AC007731, AC005500, AC003048, AL031054, AC006299, AL022098, AL079300, AC004000, AC002430, AC000111, AL034384, AC007384, AC007437, AC003089, AC007376, AC006368, AF117829, AL121578, AC006197, AL035698, AC004616, AC003971, AC003664, AP000056, AP000171, AL021329, AF124731, AL035420, AC004544, U85196, AP000097, AC006531, AL033397, AL031588, AC006948, AL022163, AC004593, AL009172, AF196970, AC005244, AC008126, AL080274, AC005296, AC005155, AC006213, AC004106, AC007685, AC002422, AC006229, AC002432, AL132712, AF124730, AC003686, AL031785, AC002483, AL031584, AL121694, AC004897, AL033504, AP000477, AC006343, AL133244, AC005253, AC005387, U95740, AC005161, AC004072, AL024508, AC002045, AL136363, AC009275, AC007955, AC005878, AC018769, AL049832, AC007091, AC004081, AL049636, AL078639, Z94721, AF196969, AC007934, AC010200, AL031228, AP000355, AP000127, AP000205, AC007092, AL096757, AC007358, AF029308, AL031289, AC004104, AC004448, AB023054, AF064863, AL050317, AC006480, AL132994, AC004041, AL049761, AC007065, AC007567, AC005325, AC008154, AC007099, AC006367, AP000553, AC009516, AC006928, Z98256, AL137100, AC003965, AC009498, AL033392, AP000086, AF015262, AC007262, AI050348, AI229043, Z97989, AC005018, AC004605, AC007159, AC007559, AC007566, AL049633, AC007564, and AF064866. |
| HNFFK36 | 3816 | 529978 | 1 - 303 | 15 - 317 | AC007283. |
| HNFFK61 | 3817 | 740644 | 1 - 351 | 15 - 365 | AA489127, AA279641, AC004883, AF184614, U57835, U61240, U60972, Z95331, AC005529, AC006026, AL008726, AL031985, AC000353, AC004876, AC005082, AL023882, U85195, and AC005527. |
| HNFFM25 | 3818 | 705856 | 1 - 798 | 15 - 812 | AA100734, H70404, AI807620, AW170393, AI148673, AI700503, AI951537, AI372906, AI978898, AI355972, AA577153, AA683135, AI418406, AW027328, AA804574, AI149104, AA040055, AI375779, AW083779, AA948638, AA922646, AI421626, AI086894, H41004, W67241, R80971, H45696, AA454614, AI336304, R50491, R70331, H04863, H48164, H50348, R71660, AA350063, H14248, AI000283, AA158079, AI873952, AA935502, H04767, AA488228, R71772, AI185581, H03390, AW085023, AA953342, N30114, AA330664, AA350336, T47929, R71761, AA350333, AA380748, R80075, AA350335, AA558800, AI498026, H52808, AW247533. |

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| HNFFO61 | 3819 | 742049 | 1 - 329 | 15 - 343 | |
| HNFFO76 | 3820 | 727306 | 1 - 323 | 15 - 337 | AI631960. |
| HNFFR05 | 3821 | 860851 | 1 - 406 | 15 - 420 | AA659360, AA680255, AA862243, AW338370, AA773162, AL120343, AA167792, AA833896, AA833875, AA494263, AA503119, AA594072, AI910608, AI950671, AA568494, AI174535, AW002777, AA608612, AI733856, AA828062, F15883, AI754653, AW082076, AA129219, AA608588, AI114827, AA251356, AI581486, AA631933, AW070703, AI601229, AA355083, AI300167, AI306232, AA480792, N71033, AW118304, AA188664, AA847096, AL120227, AA826302, N33867, AW402688, AI500453, AI537041, AA678565, AA635368, AI362415, AI364809, AL134608, AA613624, AA338167, AA492105, AA984114, AA811208, N84446, AA640410, AA640430, AA358515, AI245679, AI054354, AA489766, AA613954, AW167374, AA522642, AI924855, AI499954, AI865196, W03818, AA689285, AI583466, AI251576, AL038971, AA843779, R08918, AW274191, R44855, AW150476, AA421078, AI499588, AA054055, AI708005, AA346458, AW195988, AL134519, AA581247, F28352, H67863, AW001268, AA808186, AI469599, AA354259, AI088162, AI536625, AI223700, AW265244, AA654661, AA133332, AI745335, AI357551, AW265009, AI597580, AA745373, AA503298, AA594043, AI610737, AL042927, AA780784, AA071393, AA677671, AI040051, AI188390, AI282793, T07769, AL041894, AA904211, H18914, AA972809, AA984171, AA340602, AI270370, AA679194, N22037, AI253382, AW265186, AI042225, AL135352, AI978718, AI054414, AI914879, AC002331, Z92542, AC004020, AL035685, AC005722, AL021154, ALI33445, AC005520, AC007546, AC004216, AL031734, AC005701, AC005510, AL079305, AC002558, AC005071, Z85996, AC009721, AC005670, AL034376, AF001548, AC004976, AC004253, AC007590, AC007746, AC009509, Z78421, AB026898, AL035106, Z98886, AC005747, AL079333, Z82198, Z85987, AC003101, Z97353, AC004000, AL035652, AC005279, AC005751, AC005317, AP000260, AL034375, Z98941, AL049760, AC007278, Z82195, D83729, Z99756, AL035400, AL049691, AP000499, AC005091, AL008709, AC007879, AP000146, AC002351, AP000099, AL024508, AF015262, AC002070, AJ229043, AL031280, AP000036, AC006925, AC007695, AL035694, AL034371, AC006549, AC006960, AC007159, AC005192, AL031055, AC021528, AC006241, AF130248, AL035658, AL031294, AC007221, AC003664, AC005668, L78810, AL009029, AC010206, AC006571, AL049759, AP001051, AC004912, Z97196, AL022324, AC003667, AC005026, AC006043, AC008119, Z97192, AC004884, AC005296, AC006315, AC010077, AL035251, AC009225, AC007514, |

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| HNFFR46 | 3822 | 574618 | 1 - 149 | 15 - 163 | AC005873, AL035587, AL023653, AC004125, AC006080, AL008712, AL049773, Z75741, AC008125, AL049712, AL034400, AL078584, AC004099, AC005029, AC006333, AC004865, AC007682, AL022394, AC007738, U91319, AC003958, AF111167, AL049792, AC007277, AL031117, AC005796, AC004673, AL031673, D16583, AL022334, AC005291, AC005377, AL079301, AC002302, AL133500, AC003086, AL022159, AC007540, AC008041, AJ229042, AL031778, AC007664, AC002551, AC006560, AP000469, AC018767, AC003663, AC004526, AC007240, AC003689, AC008720, AC007559, AC008040, AL022312, AL031665, AC006126, AC007774, AL049829, AL008720, AC005900, AC007773, AL132800, AC002054, AC002472, AL050326, AL080245, AB020866, AC006977, Z98749, AL022337, AL050333, AC006132, AL031666, AC006531, Z95114, AC002407, AL031293, AC004538, AL031595, AC006984, AC005363, AP000503, AF134726, AC005215, AF002223, AC005099, AC004106, AC002460, AL121578, AP000069, AP000502, AL133244, AC006020, AC005746, AC008101, AC006384, AL031466, AC005243, AC006088, AC010200, AC005224, AC006972, AL023882, AC016830, AC004810, Z95115, AL035690, AC007539, AF048729, AL031277, AL133247, AC005041, AC006323, AL035425, AC007649, AC004953, AP000076, AC000088, AC000082, AC000071, AC004905, AC005725, AL079303, AC005018, AC003969, Z98949, AL135744, AP000032, and AC005412. |
| HNFFS14 | 3823 | 558192 | 1 - 296 | 15 - 310 | M89651. |
| HNFFS23 | 3824 | 574677 | 1 - 300 | 15 - 314 | AC004782. |
| HNFFS46 | 3825 | 574669 | 1 - 294 | 15 - 308 | AL078644. |
| HNFFS96 | 3826 | 860904 | 1 - 88 | 15 - 102 | |
| HNFFT30 | 3827 | 574616 | 1 - 425 | 15 - 439 | AA345805, AB007864, and AC000159. |
| HNFFT62 | 3828 | 574623 | 1 - 390 | 15 - 404 | |
| HNFFT71 | 3829 | 574617 | 1 - 445 | 15 - 459 | |
| HNFFT83 | 3830 | 506711 | 1 - 445 | 15 - 459 | Z82215. |
| HNFFV05 | 3831 | 932364 | 1 - 362 | 15 - 376 | AA689285, AI732151, AW068996, AW069783, AA228824, AA297802, AL031291, AL121825, AL022237, AC002527, AC004985, AC005544, AC005102, AL050318, Z97200, AC007676, AC002456, AC004927, AC007617, AC005291, AL022320, AC005781, AC002994, AC007878, U91326, AF109907, Z95116, D87675, AC004752, AC004099, AC002558, AC005365, AC005874, AF134471, AC002425, AC004106, AC004832, AC004673, AC004797, AL117258, AL035079, AC007388, AC006480, AL080317, AC006088, Z84466, AL031846, AP000694, AC016027, AL031311, AC016830, AC008018, AL034379, AL133246, AL031657, AC005332, AC002465, AC006538, AC004820, AC008018, AL034379, AL133246, AL031657, AC005332, AC002465, AC006449, AC004814, AC004876, AC005971, and AC005520. |
| HNFFV66 | 3832 | 574153 | 1 - 309 | 15 - 323 | |
| HNFFV73 | 3833 | 574143 | 1 - 347 | 15 - 361 | |

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| HNFFX21 | 3834 | 574217 | 1 - 393 | 15 - 407 | AA632593, AA612727, AI801505, AA838091, W02419, AA584862, AI049845, AI871687, AA947352, AA610255, AL121287, AA857812, R79255, AA829036, N95156, AI282629, AI243789, AI870453, AW070532, AA493789, AA054156, W02749, AI285493, AA558748, AA715173, AA715075, AI216990, AA225406, AW272294, AA715955, F35374, AA302690, AI587467, AW023111, R93919, AC002430, AC007384, AC005484, AC004477, AF196779, AC006581, AC005920, AL109628, AC005722, AF001550, AF129756, AC004000, AC005694, AC004263, AP000034, AL049869, Y18000, AC005527, AC003119, Z95115, AC005071, AC004955, AC005529, Z98749, AC007934, AC007546, AC006026, Z82190, AL133382, AL109827, AL133246, Z97832, AP000501, AC005317, AC005412, AL050318, AI109758, AL133312, AC003108, AL024498, AC006992, AC005338, AF111167, AC005237, AC002310, AC004878, AC002996, AC005988, AC002470, AP000209, AI031291, AI022336, AC007225, AC004517, AC004232, AC004953, AC004148, AC005231, AC002301, AC006946, AC004890, AC006121, AP000248, L78810, AL139054, AC008154, AC006449, AL109627, AC006071, AC003046, AC004216, AC006430, AC005821, AF109907, Z83840, AC005049, AP000552, AC005736, AC008372, AF207550, AC007450, AP000505, AF030453, AC007114, AL033521, Z98884, AC004230, AL008725, AL035413, AC005088, AL009181, AC005225, AL024474, AC006001, AP000703, AL020993, AC000025, AC006208, AL009179, AC007371, AL034553, AC005690, AC005971, Z97053, AC000025, AC004242, AC007690, AC004996, AC005316, AC004973, U89335, AC007024, AC005695, AC007664, AC002565, AC007421, AC003004, AL050334, AC004832, AL031767, AF124523, AC007664, AC007537, AL031311, AC020663, AL023553, AC006017, AL049843, AL109952, AC007283, AL035405, AC002551, AC006511, AC006312, AF141309, AC004139, AC004099, AF047825, AL031431, AC004686, AC005921, AL080317, Y14768, AC005519, AC004383, AC005702, AC002302, AB023050, AC005377, AC004131, AL021391, AL049795, AL031665, Z84469, AF200465, AC005037, AL133353, AC004236, AP000101, AC003029, Z99291, AL031680, AF200465, AC006211, Z97054, AC009275, AC007227, AL135744, Z82243, AC004802, AC005841, AC006211, Z97054, AC009275, AF196969, AC006141, AC007686, AC006515, AL078639, AC005004, AL022069, AC002553, AF196969, AF031078, AL031664, X54156, U94788, AL049229, AC007899, AC006057, Z95114, AC005089, AF031078, AC003982, AC007011, Z68273, AC004757, AC007237, AL020997, AC010170, AL035249, AC003982, AJ009610, AL049631, AL031597, AC005768, AL117694, AL035443, AP000511, AF030876, AJ009610, AP000116, AC009294, AL049776, AC023879, AC002350, U62293, AL031005, U91323, Z98304, AP000116, AL033527, AL031729, Z83844, AC007021, AL035685, AC005057, AC016025, Z98050, AL033527, and Z75407. |
| HNFFX55 | 3835 | 574218 | 1 - 447 | 15 - 461 | Z85996. |
| HNFFX79 | 3836 | 574152 | 1 - 358 | 15 - 372 | AC005610. |
| HNFFZ53 | 3837 | 526845 | 1 - 431 | 15 - 445 | AA442241. |
| HNFFZ89 | 3838 | 913701 | 1 - 987 | 15 - 1001 | |

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| HNFFZ91 | 3839 | 860897 | 1 - 758 | 15 - 772 | AA856866, AI921765, AA636077, AA828619, AL038842, AA807704, AI049999, AA720732, AA297776, AW243793, AA632765, AA515728, AL079734, AI039257, AW327624, AA773171, AA878431, AI306232, AI251576, AA502991, AI732151, AI282253, AI583466, AA181917, AI433952, AI090377, AI357823, AA101744, AA832175, AI336771, AI285493, AI801505, AA729004, AA284247, AL133448, AL121655, Z84474, AC005786, AC007371, AP000556, AC002984, AC005602, Z83822, AC005512, AF196779, AL035464, AF207550, AP000557, AC005303, AC005209, AC003041, AC004148, L44140, AC005003, AC002365, AC004703, AL035079, AC005972, AC004921, AC006441, AC005412, Z68331, AC004067, AC005529, AC005015, Z83840, X57103, AL078611, AP000030, AL049611, AC005527, Z83844, AL035414, AC005619, AL109628, AC007688, AP000692, AL024498, AC009247, AL139054, AC005519, AL034420, AL020997, Z99127, AC000387, AC002558, AC006057, AC006312, AL109984, AC004263, U91326, AC005089, AL050318, AC006101, AL133246, Z97054, AC003103, AC004816, AL031005, AC004616, X55448, U78027, AC006538, AC005004, AC007686, AC005180, AC007461, AC007226, AL022320, AL022315, AC006512, AP000049, AI096701, Z99716, AL078476, AL020995, AC006064, AC004678, AC005182, AL050321, AL031587, AC000025, AL024507, AC007421, AL080243, AC002366, AL049839, AC005369, AC006211, AC004967, AC006360, U91327, AL035422, AF205588, AC005971, AP000311, AC008044, AC004383, AC002544, Z95113, AL132712, AF109907, AC005914, AC007690, AC008372, AL022721, AC004034, AF165926, AC005358, Z83845, AC004812, AC009516, AC006285, AC005065, AC004643, AL121652, AP000114, AP000046, AC000353, AP000549, U62317, AC006208, AC004797, AL031003, AJ006345, AC016830, AC004673, AC007664, AC004257, AC004821, AC002483, AC007263, AC006474, AL049757, AC016025, U47924, AL022316, AC007510, AC004584, AC005666, AL121603, Z98051, Z84480, AI049795, AC004876, AL031121, AC002472, AC004887, AC005071, AC007384, AL021808, AC006261, AC007051, AC008039, AL031276, AC005684, AL049694, AF030876, AC006487, AF107885, AC004955, AC005355, AC006273, AC006088, AL096703, AC004883, AF053356, AL031657, AC004386, AC005011, AL031722, AF217403, AL117330, U91323, AL020993, AC005822, AL031846, AC005695, AC005231, AL031346, AC004150, AC002310, AC005778, AP000552, AP000065, Z86090, AC002094, AC006166, AC004150, AL031680, AC003108, AC004033, AL034548, U80017, AP000355, AB001523, AL034429, AC005183, AC003010, AL122020, AL021939, AC006084, AC005037, U96629, and U52112. |
| HNFGB37 | 3840 | 577342 | 1 - 292 | 15 - 306 | Z95118. |
| HNFGC17 | 3841 | 860899 | 1 - 435 | 15 - 449 | AA639859. |
| HNFGC46 | 3842 | 967538 | 1 - 309 | 15 - 323 | AA702690, AI570659, H58517, and AC005318. |
| HNFGC53 | 3843 | 860900 | 1 - 615 | 15 - 629 | |
| HNFGC57 | 3844 | 782183 | 1 - 427 | 15 - 441 | |

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| HNFGC64 | 3845 | 851981 | 1 - 440 | 15 - 454 | AC005776. |
| HNFGE16 | 3846 | 781720 | 1 - 303 | 15 - 317 | |
| HNFGE36 | 3847 | 684992 | 1 - 566 | 15 - 580 | T72851. |
| HNFGF83 | 3848 | 526843 | 1 - 349 | 15 - 363 | |
| HNFGH24 | 3849 | 524419 | 1 - 328 | 15 - 342 | AF184110, and AC006059. |
| HNFGH71 | 3850 | 954601 | 1 - 404 | 15 - 418 | |
| HNFGI01 | 3851 | 921431 | 1 - 660 | 15 - 674 | H95198, AW274228, AA135376, AA838709, AI031681, N51649, AI380604, U92072, AF118890, and AF118889. |
| HNFGI49 | 3852 | 909707 | 1 - 285 | 15 - 299 | AA305489, AI970612, AI088792, AII29935, AW340706, AI445737, AW129405, AW029494, AI339728, AA431754, AA481465, N23212, AW072683, AA587221, AW273074, AA716154, AI624922, AW117722, AI582747, AA306890, AI362727, AW013971, AI636029, AI142286, AA477767, AA152108, AA230286, AA152033, AA812974, AA230236, AW002763, AI147376, AW054932, AW024764, AA233879, AA486843, AA873861, AF057026, and AF086624. |
| HNFGI84 | 3853 | 783204 | 1 - 248 | 15 - 262 | AJ012008, AP000504, AF129756, and AF109905. |
| HNFGI93 | 3854 | 526534 | 1 - 283 | 15 - 297 | AA812141, AA487621, AA488746, AA299189, N32849, AW243793, AW270343, AA559241, AA290563, AA760808, N72524, AA454177, AA487475, AA570230, AI753488, AW102846, AW084466, AI079511, AI561060, AI049508, AW270300, AL137998, AA569471, AI366993, AI014843, AW070892, AA483223, AA101689, AA665021, AA302811, AA811710, N91070, AA491955, AL042420, AC004883, AL021707, AC002551, I01960, M11567, AL021307, AC005772, AL031905, AL035422, Z98047, AC004821, AC003108, AL096701, AC005412, AL022311, A63032, AL109847, AC006946, AF053477, AC003969, AC005065, AC000117, Z83826, AL121694, AL118523, AC005837, AL034379, Z95114, AC007205, AC007191, AL034344, AC006130, AP000127, AP000205, Z98036, AC004662, AC004099, AC004552, Z84469, AC004894, AL049647, AC003035, AC005387, Z98745, AC007436, AC005678, AC004228, Z79997, U07561, AL078611, AF045555, AL035687, Z97054, AC005081, AC006121, AC004771, AL031679, AP001052, AC007617, AC007270, AL121652, Y12855, AC002073, AF003529, AC008079, AL132642, AC004953, Z75746, Z84721, AC006985, AP000280, AC007033, AL023575, AC004752, AL109798, U78027, AP000039, AP000107, AC006465, AC002119, Z85987, AL035587, AL031276, AF064866, AC007324, AL049694, AL031577, AC008101, AC004253, AC004595, AC003074, AC004701, AL050318, AC004051, AC005482, AL031311, AC004984, AC005399, AC004020, Z97200, AC002350, Z95152, AC007637, AL080243, AL117693, Z98304, AC003965, AC004234, U93305, AL121653, AI.121658, AF196779, AL022721, U96629, AL137572, AP000545, AC005565, U15177, AC007124, AL050324, AC003065, AC005033, AP000689, AC007666, AL009031, AL109753, AC002326, AC005803, AB003151, AL031283, and AP000501. |
| HNFGK28 | 3855 | 574599 | 1 - 321 | 15 - 335 | |
| HNFGK29 | 3856 | 574593 | 1 - 221 | 15 - 235 | |

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| HNFGK39 | 3857 | 1 - 225 | 15 - 239 | AL031005. |
| HNFGL31 | 3858 | 1 - 469 | 15 - 483 | AC005071. |
| HNFGL94 | 3859 | 1 - 138 | 15 - 152 | |
| HNFGM40 | 3860 | 1 - 357 | 15 - 371 | AI758365, R25772, AI199589, AA905339, AW410939, AA101566, AI828038, AI743331, AW294803, AI990537, AI907224, AI990873, AI636883, AI907223, AA781736, and AI479878. |
| HNFGM61 | 3861 | 1 - 294 | 15 - 308 | AW239189, AW327701, AA206129, AL048272, AW239069, AA352871, AA310523, AA295649, AA481822, AW384995, AW384998, I193967, AA759007, R48716, AA434007, AW376413, H25589, T54238, R74215, H30574, AW404846, AF149291, and D21261. |
| HNFGM76 | 3862 | 1 - 868 | 15 - 882 | AI860139, AI738678, AW149459, AI394329, AI499859, AI879584, AI475610, AI094142, AI057183, AW051629, AW136472, AW293272, AI886866, AI825816, AA236872, AI189241, AA927552, AI084187, AW250159, R71853, AI523638, AF150628, and AF132599. |
| HNFGN36 | 3863 | 1 - 635 | 15 - 649 | AA085530, AA278791, and AI961765. |
| HNFGN60 | 3864 | 1 - 322 | 15 - 336 | ZS9518. |
| HNFGP07 | 3865 | 1 - 522 | 15 - 536 | |
| HNFGP31 | 3866 | 1 - 113 | 15 - 127 | AL135009, and AF053630. |
| HNFGP64 | 3867 | 1 - 719 | 15 - 733 | AW117576, AA648940, AA814664, and AA749041. |
| HNFGQ23 | 3868 | 1 - 370 | 15 - 384 | AL035530. |
| HNFGQ58 | 3869 | 1 - 300 | 15 - 314 | |
| HNFGU56 | 3870 | 1 - 353 | 15 - 367 | |
| HNFGW96 | 3871 | 1 - 753 | 15 - 767 | H24136, R25934, ZA5244, and AI214671. |
| HNFGX55 | 3872 | 1 - 722 | 15 - 736 | T89765, and T84142. |
| HNFGZ03 | 3873 | 1 - 486 | 15 - 500 | AI765111, and AC006953. |
| HNFHA11 | 3874 | 1 - 436 | 15 - 450 | |
| HNFHD40 | 3875 | 1 - 468 | 15 - 482 | |
| HNFHF18 | 3876 | 1 - 300 | 15 - 314 | |
| HNFHF32 | 3877 | 1 - 310 | 15 - 324 | |
| HNFHF33 | 3878 | 1 - 397 | 15 - 411 | |
| HNFHF53 | 3879 | 1 - 338 | 15 - 352 | AL034375, and AC002326. |
| HNFHG35 | 3880 | 1 - 222 | 15 - 236 | |
| HNFHH12 | 3881 | 1 - 250 | 15 - 264 | |
| HNFHH31 | 3882 | 1 - 304 | 15 - 318 | |
| HNFHH33 | 3883 | 1 - 348 | 15 - 362 | |
| HNFHH83 | 3884 | 1 - 299 | 15 - 313 | |
| HNFHH88 | 3885 | 1 - 116 | 15 - 130 | M62505, AC003007, and AC005632. |
| HNFHI17 | 3886 | 1 - 214 | 15 - 228 | |
| HNFHJ10 | 3887 | 1 - 340 | 15 - 354 | AC006953. |

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| HNFHK07 | 3888 | 953538 | 1 - 267 | 15 - 281 | |
| HNFHK46 | 3889 | 860844 | 1 - 433 | 15 - 447 | |
| HNFHK77 | 3890 | 576186 | 1 - 415 | 15 - 429 | |
| HNFHK85 | 3891 | 577324 | 1 - 420 | 15 - 434 | AW151017, AI361481, AI660038, AA668973, H16074, AC002549, and AC003049. |
| HNFHM09 | 3892 | 657247 | 1 - 117 | 15 - 131 | |
| HNFHM47 | 3893 | 916624 | 1 - 875 | 15 - 889 | AI283842, AA928413, R85226, W16867, AI902392, T07285, N54179, AA808903, AA714028, AL133867, H50738, AA086360, T06699, H91188, AD000092, AC005778, AL050318, X65032, AC005089, AC005826, AC007537, AC006379, AL008631, AI109865, AI035410, AI022302, AC007059, AL021808, AC003657, U78027, AL035422, AC006454, X14448, AF147433, AC008127, AC003688, AL031657, AL049757, AL031721, AC005921, AC005822, AF001552, AC011331, Z82189, AC005837, AC002476, AD000864, AC007421, AL109984, AL031780, AC004815, Z98941, AC005703, AL021407, AC003025, AC004814, AF047825, AC008040, AC012627, AC007880, AC004998, AC004228, AC005722, AL035587, Z98051, Z82976, AL023575, AL022324, L44140, AC004921, AC005568, AL121652, AC002364, AF139813, AC005828, AL121825, AP000702, AL035681, AP000703, AL034343, Z84466, L39062, Z84723, AC000097, Z99129, AC003043, AL096769, AC007842, AP000691, AC006547, and AC007201. |
| HNFHM58 | 3894 | 674349 | 1 - 121 | 15 - 135 | |
| HNFHM60 | 3895 | 662643 | 1 - 74 | 15 - 88 | |
| HNFHN03 | 3896 | 860887 | 1 - 275 | 15 - 289 | AA573693, AA313075, AA550850, AL047645, T54673, AA468356, AA608529, AW085621, AL037777, AA290802, R09127, AA744583, AI089968, AI088759, AW026427, AA808982, F23235, AA635413, N48297, AA253451, AA593092, AW268329, AA489797, R11510, AA372420, AI053568, AA009855, AI356986, AA284888, AA284638, AA290682, AA436404, AA454759, AI308598, T71936, AI888261, AL049830, AL023581, AC005411, AL034420, AL121653, AC002524, AF029308, AC004525, AC002303, AL139054, AL050317, AC006285, AL049569, AC004893, AC005094, AL031905, AC002492, AC005037, AC002364, AC005237, AC005666, AC005587, AC018359, AL133216, AL121757, AC005952, AC002128, AL035422, AL121825, AC006581, X04530, AC005684, Z99943, AC006271, AF024533, AF111168, AC002565, X58139, AJ010770, AC005914, AL022400, AC006211, AC005920, AC004927, AF051976, AL049779, AL022320, AL121578, AC004651, AC006368, AC009247, AF030453, AP000500, AC006323, AC005193, AF165926, AL023553, AL035411, AL117356, AL133445, AB026899, AC006077, AC005880, Z97630, AC004106, AL096766, and AC006462. |
| HNFHQ01 | 3897 | 938114 | 1 - 401 | 15 - 415 | AW328430, F12145, AI815981, and AA311733. |
| HNFHQ23 | 3898 | 921950 | 1 - 422 | 15 - 436 | |
| HNFHQ32 | 3899 | 765827 | 1 - 424 | 15 - 438 | |
| HNFHQ67 | 3900 | 576147 | 1 - 226 | 15 - 240 | |
| HNFHR70 | 3901 | 586494 | 1 - 331 | 15 - 345 | AA299540, AC000159, and AB007864. |

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| HNFHS84 | 3902 | 725666 | 1 - 433 | 15 - 447 | |
| HNFHS85 | 3903 | 576118 | 1 - 299 | 15 - 313 | |
| HNFHU20 | 3904 | 512927 | 1 - 743 | 15 - 757 | M79201. |
| HNFHU27 | 3905 | 683506 | 1 - 320 | 15 - 334 | AA281626, AA626747, AA744220, AW406447, AI281903, AA736472, AA652057, AA649642, AA598997, AA125788, AA095511, AW088058, AW074207, AA947370, AL042420, AI571512, T07324, AA553604, AI299694, AA836275, AA494163, AA151807, AA831388, AA338522, AW148507, AI281881, AC011311, AC006581, Z95329, AC004526, AI135744, AC004963, AL021707, AP000500, AC005303, AC002090, AF055066, AP001137, AF196971, AF067844, AC005703, Z99570, AC008179, AC004858, AL049869, AF130343, Z72522, AL021878, AF205588, AC004531, AC005994, L29074, AC007050, AC006026, AC006213, AL121603, AL133238, AF109907, AF053356, AL096701, Z69921, AC004991, AC016025, AC004647, AC006356, AC016026, AL034402, AC005971, AP000348, Z82184, AC006071, Z85986, AC000052, U44395, AP000552, AF087510, AC005531, AF049895, AL031584, AL033521, AC006285, AC004765, AB026899, AC007845, AC007066, AL121658, AC020663, AC005102, Z93023, U80017, AL031257, AC004041, AL121877, AL022323, AP000153, AP000012, L48473, Z83820, Z98048, AC006313, AL031589, AJ246003, AC003029, AC002310, AC004033, AF165926, U50429, AL035071, AL022322, AL049759, AC003684, AC006312, AC006064, AC002425, AP000556, AC007919, AL080243, and AI031431. |
| HNFHU85 | 3906 | 506309 | 1 - 364 | 15 - 378 | AL138162, and AC004490. |
| HNFHV81 | 3907 | 766220 | 1 - 396 | 15 - 410 | AA186965, R74512, Z42358, and AI904695. |
| HNFHW14 | 3908 | 939763 | 1 - 522 | 15 - 536 | |
| HNFHW40 | 3909 | 577110 | 1 - 302 | 15 - 316 | W21388, D89870, AC004152, and Z58159. |
| HNFHW70 | 3910 | 757261 | 1 - 303 | 15 - 317 | AA228901, T89776, T71470, and Z83844. |
| HNFHW81 | 3911 | 577329 | 1 - 394 | 15 - 408 | |
| HNFHX24 | 3912 | 934305 | 1 - 627 | 15 - 641 | AA682722, AA579680, AA995482, and H60525. |
| HNFHX44 | 3913 | 716852 | 1 - 279 | 15 - 293 | AF072099, and AC008984. |
| HNFHY29 | 3914 | 860879 | 1 - 569 | 15 - 583 | |
| HNFIA33 | 3915 | 861010 | 1 - 280 | 15 - 294 | AB017919. |
| HNFIB47 | 3916 | 523438 | 1 - 305 | 15 - 319 | AC007032. |
| HNFIB67 | 3917 | 577326 | 1 - 111 | 15 - 125 | |
| HNFIC22 | 3918 | 577442 | 1 - 345 | 15 - 359 | AL031283. |
| HNFIC43 | 3919 | 707264 | 1 - 371 | 15 - 385 | AW276703, and AC005280. |
| HNFIE18 | 3920 | 576032 | 1 - 212 | 15 - 226 | AC005095. |
| HNFIG07 | 3921 | 918389 | 1 - 465 | 15 - 479 | AC002091, AR026676, AC003695, Y10742, and AR026672. |
| HNFIH79 | 3922 | 576143 | 1 - 251 | 15 - 265 | AI088952. |
| HNFIJ46 | 3923 | 919275 | 1 - 579 | 15 - 593 | |

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| HNFIK03 | 3924 | 921951 | 1-276 | 15-290 | AL049553. |
| HNFIK37 | 3925 | 576151 | 1-223 | 15-237 | T47739, N27353, AA084070, F35659, AL120343, AI951436, AI313166, AL048925, AC005015, AL035587, AL022237, AL031584, AP001035, AL096712, Z82214, AC003959, AC005519, AC007738, AL031296, AC001231, AL121603, AL109654, AL049776, AC000134, Z98752, AP000151, AC006965, AL096766, AC006984, AC005011, AC010849, AL049837, AC002059, AP000513, AL109984, AL035422, AC004596, AL021392, AC007387, AB023050, M96326, AC004799, Z82179, AL035450, AC005414, Z94865, AC005542, AL049856, AC008967, AC011422, AC006354, AC002350, AP000555, AC005822, AC003080, AC007652, AL096774, AP000080, AL122020, AC005988, Z97055, AC008134, AP000018, AP000692, AC004821, AL109620, AC007993, AP000159, AC005081, AL022160, AC004144, U91319, X14448, AC005354, AC005003, U78027, AC005608, AC007285, and AL049757. |
| HNFIK44 | 3926 | 506258 | 1-425 | 15-439 | AC004149, and AL049759. |
| HNFIM13 | 3927 | 657201 | 1-421 | 15-435 | AI583265, AL038564, and AC004687. |
| HNFIM16 | 3928 | 661500 | 1-259 | 15-273 | AC004001. |
| HNFIN33 | 3929 | 702415 | 1-431 | 15-445 | |
| HNFIN60 | 3930 | 740372 | 1-429 | 15-443 | I44517. |
| HNFIN67 | 3931 | 574569 | 1-551 | 15-565 | |
| HNFIN83 | 3932 | 779925 | 1-456 | 15-470 | |
| HNFIO27 | 3933 | 573095 | 1-447 | 15-461 | |
| HNFIO50 | 3934 | 724374 | 1-449 | 15-463 | AB007864, and AC000159. |
| HNFIO82 | 3935 | 921037 | 1-196 | 15-210 | |
| HNFIP50 | 3936 | 965283 | 1-1489 | 15-1503 | AI083668, AI880750, AI911931, AI418465, AI762839, AI659971, AI479026, AI096759, AI033897, AI401511, AI871470, AI884848, AI814201, AW406595, AI431497, AI401210, AA293370, W75960, AA744801, AI127571, AI817886, AW405264, AI684858, W728885, AW026235, AI394414, AI224469, AA292652, AW404229, AA284412, AA766620, AW026968, AW026962, AI360930, AA355073, AI332950, AA633494, AW406935, AW407230, AA535630, AW407951, AI243522, AA929024, AA768971, AW405242, AA744794, AI760712, AW408225, AI000428, AW296233, AI091955, AI432358, R88002, AA744457, AA744459, N75335, AA716083, AI352425, AA744029, AA507894, AA280941, AA811203, AI146957, AL047763, AI468866, AA293055, AL121270, AI349772, AI539771, AI538716, AI800453, AL046849, AW087445, AI440239, AL040243, AI540832, AI499463, AI249257, AW301409, AI800433, AI275175, AL043326, AI064830, AI433976, AI620284, AI625079, AI702433, AL045500, AI433157, AI500659, AW238730, AI250293, AI702406, AI567351, AL119791, AI349933, AW117882, AI281773, AW071349, AI469811, AW195957, AI613017, AI499131, AI439087, AI568855, AI678302, AI631107, AI568870, AI224992, AL121365, AI269696, AI868831, AI633419, AI498579, AI866002, AI436456, AW274192, AI610645, AW074993, AI521012, AI349004, AI349598, AI580190, AL047042, AI866608, AI349645, AI348897, AL119748, |

AL135661, AI624668, AI612913, AL038605, AI570384, AW071417, AL119049, AL036802, AL036396, AL045903, AI475371, AI635461, AI802542, AI499393, AI349256, AW169653, AW068845, AI687728, AI857296, AL036146, AL044207, AI863014, AI564719, AI636445, AW103371, AI690426, AI758437, AW303152, AI811344, AI281779, AI862142, AI445432, AW008512, AI271786, AI873731, AI569616, AI281762, AI440426, AW162071, AI580984, AI597750, AI590128, AI340582, AI682841, AI499512, AW002342, AW075351, AL048871, AW148320, AI500077, AW074869, AI445025, AW026882, AI349614, AL038778, AW268253, AI312152, AI818206, AL040169, AI345735, AI349937, AW089572, AW168650, AI699857, AW167776, AI754897, AI036274, AL036759, AI884469, AI866887, AW104724, AW085799, AI439745, AI536685, AI497733, AI799199, AI432969, AI282281, AI636456, AI811863, AI285735, AI869367, AI818683, AI318280, AI620868, AI434281, AI343112, AI619502, AI969601, AI446628, AW168384, AI539153, AW183130, AW196141, AI207510, AI804585, AI609331, AI283941, AI920968, AI500553, AI673256, AI610756, AI637584, AI282655, AI872711, AI469532, AW129202, AW169671, AI580240, AA508692, AI290154, AI269205, AW118512, AI597918, AI800411, AI690835, AI690751, AL121014, AI862144, AW301300, AW078529, AI273142, I48979, AF113013, I89947, AF113691, AF090900, AL133640, AF078844, AF090943, AL080060, I89931, AL133606, AF090903, AL133016, AL110196, AL049938, A93016, AB019565, X84990, AL110221, AF118064, S78214, AL050393, AR059958, AF090901, AF090934, AF104032, Y11587, AL117460, AL117457, AL122050, AL050146, S68736, AL137527, AF113694, AF113689, AL050149, AL050116, AF118070, L31396, L31397, AL049452, AJ242859, AF125949, AF113690, AF090896, AF113676, AF113677, AL133075, AF106862, AL050108, AL080137, U42766, A08916, AL137283, AL049314, AL122093, AL049466, AF113019, A08913, AL133557, AF017152, AL133093, AL133080, Y11254, AL080124, AL122123, AL050277, E07361, AL137557, E03348, AL096744, AL122121, I48978, AF158248, X63574, AF113699, AL133565, AJ000937, AR011880, AL137459, Y16645, AF111851, AF146568, AL050138, AF091084, AL049430, AL117394, U91329, AF079765, AL110225, AF125948, X82434, AF177401, E07108, U00763, I49625, AL117585, AF097996, AL049300, AL117583, AF017437, AL133560, E02349, AL137550, AF067728, AL137538, AL049464, A65341, AL117435, A08910, AJ238278, A08912, X70685, AL049382, A03736, S61953, AL050024, AF183393, A77033, A77035, AL133113, AL122110, I33392, AL122098, A58524, A58523, A08909, U72620, AF118094, AL049283, Z82022, AL080127, X93495, X65873, U80742, AL137648, X72889, AL137463, AF087943, AL137271, A12297, U35846, I09360, I03321, X96540, U67958, AC002467, AC007390, AL133072, AC002464, AR000496, U39656, AF061943, AL122049, AC006371, AL110197, X98834, AL096776, E05822, I42402, E08263, E08264, AL137521, Y09972, AC006336, AL080159, AL133077, AL137523, AC004686, AL133568, AL137560, I17767, AF061981, I26207, AC007392, M30514, AR013797, AF111112, E15569, I66342, AJ012755, AL122111, L13297, A93350, U95739, AC004690, AR038969,

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| HNFIP71 | 3937 | 760366 | 1 - 427 | 15 - 441 | AL137526, AF119337, AL133104, AL137556, AF026124, I00734, AF000145, A08911, A07647, E00617, E00717, E00778, Z72491, AL133081, AL022147, AL133014, AF026816, AL137476, AF003737, AL050172, AC004987, AL137533, AF091512, AF057300, AF057299, AC004200, AF100931, AL035067, Z37987, AC007298, AF106827, AL137429, AF079763, Y14314, AL110280, AR054984, U96683, A45787, U58996, AL133098, and AI337996. |
| HNFIQ17 | 3938 | 768043 | 1 - 427 | 15 - 441 | R61153, AC007845, AC016025, AC016026, Z79966, Z56830, and Z56829. |
| HNFIQ74 | 3939 | 765566 | 1 - 122 | 15 - 136 | AC000159, and AB007864. |
| HNFIR02 | 3940 | 928109 | 1 - 409 | 15 - 423 | AA160511, AI970612, AI129935, AI088792, AW340706, AI445737, AI339728, AW129405, AW029494, AA431754, AA481465, AW072683, AA587221, AA305489, AW273074, AA306890, AI624922, AW117722, AA716154, AI582747, N23212, AI362727, N48805, AA477767, AA152033, AA152108, AA230286, AA812974, AI147376, AI869656, AI184855, AW168381, AI197947, AW136145, AW002763, AW191986, AA477877, AA524288, AI928763, AA233879, AI804827, AA487203, AA740454, AA230195, AA157560, AA486843, AA157958, AI556982, AW054932, AI445690, AI521047, F34247, W42636, AI356995, AA873861, AW275822, AI659224, AI142386, AA805596, F10109, AA835930, AW084015, AA720949, AA443114, AA813801, AW016711, AI197917, AW024764, AW117703, H06723, R27339, H10925, AW083223, R38694, R76673, AA299538, F10656, AA230236, AA687564, AW083394, R27308, AW088939, and AI590774. |
| HNFIR32 | 3941 | 848254 | 1 - 459 | 15 - 473 | AL031005. |
| HNFIR86 | 3942 | 781175 | 1 - 427 | 15 - 441 | AL031005. |
| HNFIS51 | 3943 | 725648 | 1 - 362 | 15 - 376 | |
| HNFIT31 | 3944 | 697961 | 1 - 120 | 15 - 134 | |
| HNFIU07 | 3945 | 953268 | 1 - 309 | 15 - 323 | N43757, AA450199, AA085023, AW169151, AI921649, AI376100, AW074059, AI356904, AI922654, AI564284, AI816537, AI570138, AW080120, AA491284, AA722372, N22059, AI374809, AI364809, AI580652, AI357551, H71429, H50727, AA488395, T28550, AI956124, AI708009, W85752, R99385, AA578154, AA346458, AA829106, AL110223, AC005089, AC006249, AC000084, U63313, AC002491, U07562, AL035608, AC005663, AC003957, AC005664, AC004866, AC000114, Z99754, AL049843, AB032980, Z97183, AC004623, AC003042, AL024508, AC005354, M62424, AR025392, X13921, AL110121, Z68870, AC005331, AC005199, AP000265, AC002984, AC005953, Z81314, AC005206, AC006958, AL096794, Y14768, Z83313, AC005567, AP000101, AP000505, AC007666, AC004671, AC005968, AC006013, U96409, AL035701, AC005681, U85198, AC007773, AP000567, AC000052, AF064857, AC006312, AC002368, AL022170, AL022328, AC004851, AC009784, AC000784, AC002044, AL035458, AC004455, AP000154, AL022302, AL109984, AC004851, AC002044, AL035458, AC004455, AP000154, AC002565, S42659, U17077, M87923, and AP000012. |
| HNFIU14 | 3946 | 967558 | 1 - 314 | 15 - 328 | AL031276. |

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| HNFIU24 | 3947 | 677178 | 1 - 380 | 15 - 394 | AC002091, and AC003695. |
| HNFIU56 | 3948 | 733363 | 1 - 402 | 15 - 416 | AP000356. |
| HNFIV38 | 3949 | 709265 | 1 - 374 | 15 - 388 | AW300249. |
| HNFIV73 | 3950 | 764409 | 1 - 350 | 15 - 364 | AW381960, AA856911, AA533315, AW382006, AI279467, AI679002, AC007993, AC004859, AL031659, AL049636, U82668, AC005015, AC007221, AL050307, AC006430, AC005048, AC002091, U07562, AC005355, AP000080, AL024509, AL034345, AD000091, AC004817, AC010206, AC008119, Z82244, and AC022517. |
| HNFIW62 | 3951 | 740598 | 1 - 380 | 15 - 394 | R54654, AA508689, R10145, AI360932, AI161218, AI302363, AA169798, N46098, AW276222, |
| HNFIZ47 | 3952 | 720315 | 1 - 378 | 15 - 392 | AA284554, AC007382, AL035587, AC004963, AL049839, AL049869, AC005523, AC004491, and AL022323. |
| HNFJA29 | 3953 | 941525 | 1 - 498 | 15 - 512 | AA482321, and A90848. |
| HNFJA60 | 3954 | 740362 | 1 - 420 | 15 - 434 | N27743. |
| HNFJA78 | 3955 | 723390 | 1 - 318 | 15 - 332 | AL117340. |
| HNFJB80 | 3956 | 752489 | 1 - 1036 | 15 - 1050 | |
| HNFJE30 | 3957 | 574145 | 1 - 418 | 15 - 432 | |
| HNFJG33 | 3958 | 702411 | 1 - 425 | 15 - 439 | AC007275, and AC006366. |
| HNFJG44 | 3959 | 860847 | 1 - 578 | 15 - 592 | R35010. |
| HNFJH59 | 3960 | 738593 | 1 - 545 | 15 - 559 | T06440, AI491715, AI097211, AA715280, AI886336, AI382825, AI561027, AC007684, AC006071, AC005026, AC005041, U91322, AC005274, AL136297, AC007011, AC007263, AL118497, AC000085, AC004000, AC005102, AL022318, AC006205, AL035699, AC004764, AC006501, AC004895, AF111168, Z99716, AC002351, AC006120, AF053356, AC004938, Z97056, AC003957, AC004019, AL022165, AC005833, AB001523, AC007421, AC008055, AL049538, AL049694, AC004583, AC004821, AC007637, AC006511, AC004106, AC005003, AL021918, AC007371, AF109907, AL132987, AC002347, AB000877, AC002287, AL049636, AC004494, AC005839, U52112, AC006046, AC004617, AC005696, AC007151, AP000032, AL122020, Z94056, AL049757, AC002425, AC005358, AL031296, AL096791, AP000506, AC006441, AL121756, AC005736, AC005231, AC005911, AC005944, AC005288, AL031680, AL031767, AC005971, AC008044, AC003664, AC004967, AP000688, U95740, AB023048, AC004659, AC007676, AC005089, U96629, AC012085, AC005071, and AC005409. |
| HNFJH70 | 3961 | 956187 | 1 - 890 | 15 - 904 | AI912090, and AA553367. |
| HNGAC50 | 3962 | 724666 | 1 - 118 | 15 - 132 | |
| HNGAD53 | 3963 | 527977 | 1 - 213 | 15 - 227 | |
| HNGAF45 | 3964 | 526940 | 1 - 283 | 15 - 297 | AW084484, AA682801, AI766115, AB017919, AB010999, and AB008803. |
| HNGAH10 | 3965 | 968271 | 1 - 293 | 15 - 307 | AI810682, AI357542, AI364801, AW138908, AC005041, AC007546, AC005325, AC012627, L09706, AF019413, AC000052, AC004019, X69908, Z68284, AC006958, AP000354, AL022477, |

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| HNGAH27 | 3966 | 573087 | 1 - 298 | 15 - 312 | AP000355, AC004533, Z86061, AC005237, AC009178, AC007790, AC005753, AC006112, D87012, AP000502, AP000141, AP000088, L35671, AC006924, AL133243, AF135187, AC005612, AL031315, Z84497, AC005284, AF200923, AL118516, Z70280, AC005304, AL031120, AL139054, AC004212, Z97630, AP000126, AP000204, AC004522, AB023050, AP000244, AC005548, AP000512, AC005200, AL035419, AC005668, AL031431, Z96104, AL079304, AC004140, AC004963, Z82203, AC005253, AC004167, AC004849, AL132992, AC004695, AC004981, Z98748, AL050307, AC008045, AL035067, AC008079, AC007529, L20252, AL133448, AC005592, Z98036, AL024495, AC004859, U91323, AC004975, AC007796, and AL031311. |
| HNGAI23 | 3967 | 676296 | 1 - 355 | 15 - 369 | AI187426, AC006352, AC007028, AC006359, AC002041, U91320, and AC005591. |
| HNGAI35 | 3968 | 558467 | 1 - 252 | 15 - 266 | AA296593, AL022069, AL031386, AC005381, AL049613, AL035551, AB020862, AC007073, and AC004990. |
| HNGAJ10 | 3969 | 860751 | 1 - 398 | 15 - 412 | AL121840. |
| HNGAJ82 | 3970 | 577407 | 1 - 200 | 15 - 214 | A52418, and A67829. |
| HNGAK12 | 3971 | 660682 | 1 - 420 | 15 - 434 | AA361909, AA305740, AA127756, AA769607, AA703462, AW294771, AF096300, AL137755, AB014587, AC005035, U88984, and AB013385. |
| HNGAK70 | 3972 | 860770 | 1 - 353 | 15 - 367 | AC002303. |
| HNGAL51 | 3973 | 531719 | 1 - 235 | 15 - 249 | |
| HNGAL84 | 3974 | 573099 | 1 - 166 | 15 - 180 | |
| HNGAL88 | 3975 | 574666 | 1 - 243 | 15 - 257 | AC005576, and U95626. |
| HNGAL92 | 3976 | 953889 | 1 - 199 | 15 - 213 | |
| HNGAN28 | 3977 | 685436 | 1 - 150 | 15 - 164 | AC008012. |
| HNGAN78 | 3978 | 577412 | 1 - 432 | 15 - 446 | AI660791, and AI660768. |
| HNGAO40 | 3979 | 660305 | 1 - 158 | 15 - 172 | |
| HNGAP18 | 3980 | 666852 | 1 - 321 | 15 - 335 | AA580572, AW079831, AC005914, AC005529, AC006538, AC005527, AC007731, AC005500, AC006251, AC007536, AC005694, AC006273, AL121652, M63005, M63544, AL049869, AC005594, U91325, AL022323, AC004752, AC005084, AL035587, AL023575, AC004934, AF146367, AC005091, AL023803, AL031846, AF124523, X16289, and AC006130. |
| HNGAP59 | 3981 | 916323 | 1 - 152 | 15 - 166 | |
| HNGAQ54 | 3982 | 574647 | 1 - 211 | 15 - 225 | |
| HNGAR83 | 3983 | 574470 | 1 - 375 | 15 - 389 | |
| HNGAS51 | 3984 | 773208 | 1 - 231 | 15 - 245 | AL023913. |
| HNGAU59 | 3985 | 860839 | 1 - 77 | 15 - 91 | AC000365. |
| HNGAU65 | 3986 | 925692 | 1 - 235 | 15 - 249 | |
| HNGAV04 | 3987 | 506589 | 1 - 431 | 15 - 445 | |

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| HNGAV25 | 3988 | 574671 | 1 - 273 | 15 - 287 | |
| HNGAV53 | 3989 | 573092 | 1 - 360 | 15 - 374 | |
| HNGAV79 | 3990 | 574661 | 1 - 369 | 15 - 383 | |
| HNGAV84 | 3991 | 574651 | 1 - 93 | 15 - 107 | AL024473. |
| HNGAV88 | 3992 | 860753 | 1 - 439 | 15 - 453 | |
| HNGAW25 | 3993 | 574645 | 1 - 329 | 15 - 343 | |
| HNGAW40 | 3994 | 711454 | 1 - 399 | 15 - 413 | AW020198, AI003469, AW247338, AI478722, AI300507, T67734, AC005175, AF001548, AL139054, AF001550, AC005527, AL023653, AC005399, AC005529, AL035405, AL031228, AC004815, AC005535, AP000359, Z83844, AC005786, AF030453, and AL117258. |
| HNGAX82 | 3995 | 507313 | 1 - 333 | 15 - 347 | AC006953. |
| HNGAZ49 | 3996 | 715380 | 1 - 387 | 15 - 401 | AA584072, AP001069, AP000567, AC005250, and AC008372. |
| HNGBB06 | 3997 | 936080 | 1 - 408 | 15 - 422 | H50004, and H62199. |
| HNGBC50 | 3998 | 868082 | 1 - 1653 | 15 - 1667 | AW069227, AL119625, AA813902, AI702095, AI910609, AW272925, II15679, AA653221, AI634187, AI431232, AI677668, AI684208, AI720431, AI805380, AI367420, AI367401, AI986251, AA632407, AI186470, AW338292, AI128353, AI832782, AI457313, AI925423, AA491864, AL048267, AA704147, AI818212, AI473995, AI679394, AI678812, R43331, AA526413, AI679902, AW025031, AI583397, AA634737, AA484022, AA177061, AI288033, AA015918, AC002316, AC003962, AC006111, AC004832, Z99291, AC005058, AL022476, AC002115, AF207550, Z97054, AL117339, AC009516, AL133448, AC003950, AC006509, AC004812, AC002126, D87675, AJ003147, AL096701, AC004167, AC005913, AJ251973, AC000052, AC002401, AL034430, AC007666, AC005585, AC004686, AE000658, AL035422, AC007685, AC005412, AL136295, Z84466, AC005726, AL022721, AC006511, AC006061, AL049830, AP000493, AC007371, AC005746, AC005229, AC005375, AP000704, AP000558, AP000011, AP000152, AC006571, Z82203, AL031577, AL031846, AC003108, AC006121, AC004821, AC005914, Z93023, AL031432, AC007226, AC004583, AL096791, ALJ09628, AC005008, ALI17694, AC005747, AP000114, AP000046, AC005332, AP000466, AC004834, Z83844, Z93241, AC035089, AP000303, AC005084, AF053356, AL031602, AC005480, AL035400, AL121655, AL035089, AP000501, AP000557, AC002558, Z85986, AC006211, AC004673, AC009946, AL049839, AP000501, AP000557, AC005227, AC004148, AL034379, Z95114, AC005730, AF152363, Z84487, AC005696, AC005252, AL022330, AC002045, AC008044, AC004019, AC008123, AC007216, AC004895, AP000252, AL022330, AC002045, AC008044, AC004019, AC008123, AC006071, AC005620, AP000212, U85195, AL008582, AC005049, AC005279, AC004773, AF003626, AC006146, AC004033, U91323, AC005004, AC005071, AL022326, AC007283, AL031650, AL049760, AC002302, M26434, AL109623, AC004386, AC006449, AC006328, AL049569, AC006344, AC005189, AC006006, AL049709, AL031680, AC020663, AC004522, AF064861, AC008040, AP000692, AL021154, AC004032, AL021069, AC003109, AC005399, AP000269, AL049743, Z96074, AC005089, AL035681, AL023883, AP001039, AL031589, |

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| HNGBE26 | 3999 | 684761 | 1 - 361 | 15 - 375 | AC005736, AC007363, AP000049, AP000116, AC009247, AC004882, AP001052, AC010077, AC007690, AL021391, AP000103, AC007160, AC002563, AC004706, Z97056, AC004257, AL133245, AC006115, AF067844, and AC002429. |
| HNGBF41 | 4000 | 571331 | 1 - 359 | 15 - 373 | AC005553. |
| HNGBF80 | 4001 | 574475 | 1 - 345 | 15 - 359 | |
| HNGBG20 | 4002 | 860739 | 1 - 341 | 15 - 355 | |
| HNGBG50 | 4003 | 577364 | 1 - 273 | 15 - 287 | AC002492. |
| HNGBH04 | 4004 | 574469 | 1 - 163 | 15 - 177 | |
| HNGBH77 | 4005 | 577361 | 1 - 302 | 15 - 316 | AC004538. |
| HNGBI10 | 4006 | 968246 | 1 - 323 | 15 - 337 | T18597, AA585325, AA585098, R45895, R29657, Z32822, D51433, AA585101, Z32887, D57491, D59751, D61185, C15406, D53161, R28735, R29445, C15069, AI525316, AI557262, AI526078, AI526140, AI557864, R28892, AI541356, AI541365, AA585155, AA585378, AA585155, AI525500, AI557740, AA170832, AA585439, Z28355, D60765, D54897, D60844, D59436, Z33559, AI557809, AI557718, R29218, AI546999, AA585329, AI541535, AI541517, AI557731, D54850, D52835, AI526016, R28967, R28895, AI546971, AI557727, AI541205, AI526184, AI525556, C16294, C16315, AI547250, AA283326, AI541383, AI535639, AI546875, D55233, D59458, AI540903, AI557763, AI547039, AI557787, D61254, D53447, AI557734, C16300, C16296, AI557084, C16292, C15120, C15762, AA585476, AI526109, D53472, C16293, AI557807, AI541346, AI541013, AI547202, AI546831, AI557533, AI525306, AI526024, C16305, C15737, AI541374, AI541034, AA585356, AI557408, D60730, AI557758, AI546945, AI525431, AI547196, AI557279, AI525339, Z36724, AI526191, AI557155, AI535660, AI526194, AA585430, AI526117, AI557602, AI526112, AI541523, R29179, Z30131, D57186, AI557852, AI546921, AI540974, AI541307, AI546996, AI541321, AI540967, AI546891, AI525320, AI547006, AI525856, AI526158, AI546901, AI557317, AI536138, AI541492, AI557808, AI525168, AI526146, C14208, AI541422, AA585453, R29262, AI525656, AI546829, R29172, AI526113, AI541402, AI557264, AA585389, AI557799, C16290, AI541527, AI526195, R29177, AI541515, AI526176, AI557810, AI557039, AI541423, AI556967, T19407, AI547189, AI525114, AI557786, AI524904, AI525076, C14210, AI526073, AI547137, AI557041, AI541516, T41289, AA514191, AI541510, D61060, AI526205, AI526169, AI541415, AI526180, AI541027, AI546954, AI557852, AI525332, AA585434, AI525286, AI557785, AI557238, AI524891, AI540944, AA585117, T41329, C14322, AI541345, AA585420, AI557796, AJ239433, AI540920, AI546828, AI541506, AI557082, AI524890, C14391, C14723, AA174170, AI526026, AI547158, AI541075, AI547026, AI540928, A1046024, AI540882, AI557285, AI547122, AI546841, AI541514, D51413, AI557802, AI541017, AI547138, AI541390, AR062871, A25909, AR038855, X82786, Y09813, X76012, AR031358, AR031365, AJ243486, AJ244005, Y16359, AF082186, AR038762, Z32836, AR054723, X81969, D50010, D13509, X55486, AJ244004, A20702, AR062872, AR062873, A20700, D78345, A43189, |

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| HNGBI35 | 4007 | 574403 | 1-126 | 15-140 | A43188, AR017826, AJ244006, AR017907, AC005913, AJ244003, AR003381, Z30183, A62298, AF213384, AR050070, A82595, AF006072, A98420, A98423, A98432, A98436, A98417, A98427, X82834, and L36913. |
| HNGBI70 | 4008 | 781978 | 1-429 | 15-443 | N72393. |
| HNGBI88 | 4009 | 574409 | 1-331 | 15-345 | AC002310. |
| HNGBI95 | 4010 | 785983 | 1-223 | 15-237 | AC005215. |
| HNGBJ40 | 4011 | 948741 | 1-563 | 15-577 | |
| HNGBJ84 | 4012 | 573072 | 1-295 | 15-309 | |
| HNGBJ96 | 4013 | 574474 | 1-286 | 15-300 | AC007380. |
| HNGBN36 | 4014 | 526808 | 1-425 | 15-439 | |
| HNGBO34 | 4015 | 932408 | 1-412 | 15-426 | |
| HNGBP21 | 4016 | 671258 | 1-498 | 15-512 | H02689, T73124, AL080280, AL080281, and A68194. |
| HNGBP28 | 4017 | 421816 | 1-201 | 15-215 | |
| HNGBP35 | 4018 | 526806 | 1-293 | 15-307 | |
| HNGBQ20 | 4019 | 859846 | 1-523 | 15-537 | |
| HNGBQ75 | 4020 | 573047 | 1-339 | 15-353 | |
| HNGBS88 | 4021 | 575561 | 1-404 | 15-418 | AA594214, AI612901, AC002365, AC002300, AC005921, AC003684, AC004778, and Z98946. |
| HNGBT44 | 4022 | 574400 | 1-343 | 15-357 | AA252763, AL133723, AW193265, AI284640, F36273, F33566, AI688846, F29989, AA858197, AI446464, AI350211, AA824654, AA678436, AW193432, AA515435, AA350859, AA810370, AI471481, AI053672, AI282832, AI358501, AA515128, AL046409, F31204, AI061334, AA302648, H64777, AI963720, F18974, F37286, AI824562, AA340747, T07451, AI610159, AI431303, AA610491, AI471543, AI049634, AW406755, AI768952, AI358229, AI249997, AA669840, AA977743, AI365988, AA377730, AI963095, AW276827, AI669453, AA747276, AA586655, F25276, AA719805, T29180, F28776, AW339687, AA846955, F30933, AI635272, AI064864, AI270117, AW193609, AC006287, AC004006, AF117829, AL133163, Z99571, AC006965, Z93928, AF027390, AC012599, AC007014, AL022329, AC005799, AC008125, AC002303, AL031650, AL109657, AL078638, AL021918, AL021368, AC007685, AL121578, AC005409, AF130342, AL078644, AC005911, AL021808, Z84480, AC005066, AC008071, AC007227, AC003050, U91319, AC006549, AC006367, AC006153, AC007221, AC006042, AL035551, AL078593, AC006322, Z97196, AC005751, AL049830, AL096861, AL035089, AC005291, AL049775, AC006195, AL096791, AC006012, AC004673, AC006500, AL022163, AC004869, AC010072, AC004485, AP000036, AL049697, AP000260, AC004690, AC005189, U91322, AC005324, AP000069, AC005303, AC021092, AP000099, AC007590, AL022160, AC004470, AL031433, AC006525, AP000355, AC007326, AF196971, AC006213, AB020858, AL078604, AC007687, AC006561, AC006238, AL033517, AC005755, AC004686, |

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| HNGBT58 | 4023 | 577325 | 1 - 323 | 15 - 337 | Z82975, AC003684, AL121658, AL023799, AL035086, AL135744, AC005914, AC005792, AC002386, AL035667, AJ229041, AC004025, AP001172, AC007043, AC006043, AC006313, AC007436, AC005699, AC000385, AF029308, AC002984, AL021307, AC005015, AC004554, AC016025, AL034548, AF045555, AF000359, AC007845, AL031584, U69730, AL109798, AC005191, AC007262, AC003003, AP000359, AC002289, AL078639, AC005722, AC007681, AC005081, U73633, AP000567, AL049845, AL109939, AJ011930, AL021155, AC004804, AC009223, AL121823, AL022727, AL049776, AC002367, AC005255, AP000159, AF181896, AC006017, AF165926, AC005013, AC003001, AP000020, AC004806, AC004547, AL049588, AC007363, AL133238, Z83840, AC005301, AC003083, AC006211, AC005400, and Z97181. |
| HNGBT72 | 4024 | 579064 | 1 - 358 | 15 - 372 | AW162493, AW298244, AA435512, AW298626, AW295626, AW295622, AA527713, AA663337, AA393547, AC005057, AC007536, AC005520, U82670, Z59900, and Z59880. |
| HNGBU15 | 4025 | 574467 | 1 - 209 | 15 - 223 | |
| HNGBV67 | 4026 | 574468 | 1 - 420 | 15 - 434 | |
| HNGRW63 | 4027 | 574466 | 1 - 216 | 15 - 230 | |
| HNGBX64 | 4028 | 574472 | 1 - 96 | 15 - 110 | |
| HNGBZI6 | 4029 | 667293 | 1 - 414 | 15 - 428 | |
| HNGBZ17 | 4030 | 575717 | 1 - 437 | 15 - 451 | AC005332. |
| HNGBZ20 | 4031 | 812895 | 1 - 318 | 15 - 332 | |
| HNGBZ55 | 4032 | 573069 | 1 - 249 | 15 - 263 | AI761359. |
| HNGBZ92 | 4033 | 574464 | 1 - 218 | 15 - 232 | |
| HNGCA47 | 4034 | 574465 | 1 - 192 | 15 - 206 | |
| HNGCA61 | 4035 | 574461 | 1 - 278 | 15 - 292 | |
| HNGCB44 | 4036 | 674670 | 1 - 389 | 15 - 403 | U95740. |
| HNGCC47 | 4037 | 926947 | 1 - 130 | 15 - 144 | |
| HNGCD08 | 4038 | 959963 | 1 - 365 | 15 - 379 | |
| HNGCE85 | 4039 | 970738 | 1 - 293 | 15 - 307 | AA292726, AA887639, AI351774, AI655222, AW009008, and AI989605. |
| HNGCF09 | 4040 | 527972 | 1 - 139 | 15 - 153 | |
| HNGCF28 | 4041 | 574397 | 1 - 222 | 15 - 236 | |
| HNGCG83 | 4042 | 868075 | 1 - 389 | 15 - 403 | H86238, and AC005670. |
| HNGCH05 | 4043 | 932404 | 1 - 476 | 15 - 490 | H92525, H48715, AI085029, H90375, AA075537, R01389, AA668973, AI352404, AW103601, AI217313, W88502, H70430, AA528363, Z84480, AC003103, AC002352, AF196969, AC000357, AC005335, AC007535, AC003101, AC005520, U91322, Y11535, AF006752, AC005546, AC006162, AC005072, U82668, AL023668, AL023913, AC002350, AC004834, AF061032, AC001228, AB018503, AC008989, AC005902, AC004887, AL035249, AC006165, AC006166, AB023051, Z73979, AC006313, Z98950, and AC006430. |

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| HNGCI02 | 4044 | 920722 | 1 - 224 | 15 - 238 | |
| HNGCI11 | 4045 | 967513 | 1 - 456 | 15 - 470 | |
| HNGCI17 | 4046 | 526807 | 1 - 403 | 15 - 417 | |
| HNGCI53 | 4047 | 825377 | 1 - 403 | 15 - 417 | |
| HNGCI69 | 4048 | 574456 | 1 - 264 | 15 - 278 | |
| HNGCK34 | 4049 | 706561 | 1 - 193 | 15 - 207 | |
| HNGCK82 | 4050 | 796479 | 1 - 130 | 15 - 144 | |
| HNGCK93 | 4051 | 574458 | 1 - 262 | 15 - 276 | AI025072. |
| HNGCL31 | 4052 | 571332 | 1 - 395 | 15 - 409 | |
| HNGCL55 | 4053 | 574453 | 1 - 377 | 15 - 391 | |
| HNGCM05 | 4054 | 932409 | 1 - 133 | 15 - 147 | |
| HNGCO37 | 4055 | 708694 | 1 - 396 | 15 - 410 | |
| HNGCO45 | 4056 | 573055 | 1 - 370 | 15 - 384 | |
| HNGCO86 | 4057 | 779203 | 1 - 365 | 15 - 379 | D80045, D80212, D80157, D80268, D80248, D80195, D59502, D80439, D59619, D80210, D80240, D81026, D81030, C14389, D80164, C15076, D80219, D59653, D80022, D80166, D80193, C06015, D80302, D59467, D80391, D59275, D80038, D59787, D80227, C14331, D80269, AA305409, D58283, D80196, D80247, D50979, D59859, D51423, D51799, D80253, D80043, AA305578, D59927, D80133, D80366, D80188, D51022, D80522, D50995, AA514188, C14014, D51060, D59610, D80378, D51103, D57483, D59889, AA514186, D80024, D51759, AW177440, AW360811, C14429, D80241, D80251, AW178893, C75259, C03092, AW377671, AW375405, AW360844, C05695, AI525923, D59373, AW377676, T03269, AW178906, AW366296, AW178986, AW360817, D45260, AW179328, AA809122, T48593, D80258, AW375406, AW378534, AW179332, D59503, AW377672, H67854, AW179023, AW178905, H67866, AW177731, AW378528, AW178762, AW177511, F13647, D51213, AW179020, D80064, T11417, AW177501, AI535686, AW177734, D81111, D51250, AI525920, C14344, AW360841, AW352171, D59317, AW352170, D58246, C14227, AW178907, AW177733, AW178908, AW179024, D51221, AW360834, AW352120, D59551, C14973, AI525227, AW177505, AW367950, AW178775, D80014, AW352120, D59551, C14973, AI525227, AW179329, AW178980, D59695, AW178914, D80949, AW178909, AW177456, AW179004, AW179018, AW352158, AW176467, D59474, AW352117, Z21582, AW178774, AW178754, AW179017, C14957, C14046, C14407, AW179009, AW179012, D60010, AI525925, AA514184, D80228, D60214, AW177728, C13958, AI525235, D58101, D52291, AI557774, D45273, AW378525, AW378540, AW177722, AW352163, AI525242, D59627, AW178911, AW378543, D80168, AI525237, AW179013, AI525222, AA285331, AW378542, D80388, C05763, D80168, AI525237, AW179013, AI525222, AA285331, AW378542, AI557751, AI525215, AW178781, C14298, AW378539, C16955, AI525928, Z33452, T02974, AI910186, F13796, AW360855, T03048, D51053, AI535663, T02868, H67858, C04682, D31458, |

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| HNGCQ37 | 4058 | 708698 | 1 - 325 | 15 - 339 | A82595, AR060385, A84916, AB028859, AJ132110, AB002449, A62300, A62298, AR018138, AR008278, AF058696, I50126, I50132, I50128, I50133, I14842, A45456, AR016514, AR066487, A43192, A43190, X67155, AR060138, Y17188, A94995, D26022, A26615, AR052274, Y12724, AR038669, A25909, A30438, AR066488, A67220, Y09669, D89785, A78862, D34614, AR054175, AR008443, Y17187, A63261, D88547, AR008277, AR008281, AR016691, AR016690, U46128, AR062872, D50010, A70867, AR016808, X82626, AR008408, I79511, A64136, A68321, AR060133, I82448, and AR025207. |
| HNGCU24 | 4059 | 574339 | 1 - 137 | 15 - 151 | |
| HNGCU70 | 4060 | 574340 | 1 - 141 | 15 - 155 | AC005920. |
| HNGCW38 | 4061 | 574463 | 1 - 308 | 15 - 322 | |
| HNGCW81 | 4062 | 577253 | 1 - 389 | 15 - 403 | AW104496, and AA485071. |
| HNGCW82 | 4063 | 574344 | 1 - 348 | 15 - 362 | |
| HNGCW83 | 4064 | 574338 | 1 - 126 | 15 - 140 | |
| HNGCX07 | 4065 | 953900 | 1 - 334 | 15 - 348 | |
| HNGCY37 | 4066 | 952203 | 1 - 546 | 15 - 560 | AI564185, AA829565, AL133246, AC002416, AL031587, AP001052, AC006071, AL080243, AC004386, AL109759, AF001552, U52111, AL109798, AC005156, AC002546, AC006013, AL049776, AC005911, AC009336, AL049539, AC008372, AL035587, U85195, AL022165, AL035089, AC005411, AL049760, AF205588, AC004526, AJ246003, AP000031, AC005069, AC005342, Z68285, AL121658, AC004552, AC005225, AL109628, AC006111, AL021707, AC005255, AL109963, AE000658, AC004019, AC005971, AF111168, AL031255, AC007773, AC002470, Z86090, AL033527, AC004805, AL031229, AL117329, AL022322, AP000359, U95742, AP000008, AP001037, AC005632, AP000704, AC006480, AC003109, AC008040, AC004770, AC009308, AL031387, AC006449, AL133448, AL022476, AC004478, AL031274, AL021579, AC007488, AC007543, AC006241, AC007221, AC005484, AL049829, AL008726, AL049766, AL109847, AF045555, Z93023, AC005102, AC002350, AC007325, AC005072, AC007981, AC005914, AF064861, AL050318, AC005562, AC005081, AC009248, AC004659, AC004139, AL024474, AP000555, AL035455, AC004859, AL133163, AC005703, AC005488, AC002302, AL049692, AC007283, AL133245, and AC004134. |
| HNGCY41 | 4067 | 806055 | 1 - 272 | 15 - 286 | |
| HNGCY43 | 4068 | 574392 | 1 - 333 | 15 - 347 | AC002127. |
| HNGCY59 | 4069 | 959967 | 1 - 784 | 15 - 798 | AA649070, AA210872, AA809496, AI567520, AA405464, and N67248. |
| HNGCZ13 | 4070 | 660916 | 1 - 394 | 15 - 408 | |
| HNGDA09 | 4071 | 574454 | 1 - 220 | 15 - 234 | |
| HNGDA56 | 4072 | 574452 | 1 - 324 | 15 - 338 | |
| HNGDB25 | 4073 | 784836 | 1 - 364 | 15 - 378 | |

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| HNGDB65 | 4074 | 526852 | 1 - 248 | 15 - 262 | AL022101, and AL023753. |
| HNGDD30 | 4075 | 573021 | 1 - 421 | 15 - 435 | |
| HNGDD39 | 4076 | 709270 | 1 - 150 | 15 - 164 | T18597, AA585325, Z32822, AA585378, R45895, AA585098, R29657, Z32887, D59751, D53161, AA585329, AA585101, C15406, D57491, D61185, Z33559, R28735, R29445, D59458, AI557718, AI525316, AI541356, AI557262, C15069, AI557864, AI557740, AI526078, AI525500, D51433, R28892, D59436, R28965, D54850, AI541517, AA585439, Z28355, AA585155, AI526140, AI541365, R28967, AA170832, AI535639, D60765, D54897, D60844, Z36724, R29218, AI541205, AI557809, AI525556, AI557727, AI557731, AI546831, AI546971, R28895, AI535660, AI541535, AI557787, AI526016, AI526184, AI540903, C16294, C16315, AA585430, AI541034, AA283326, AI557084, AI541383, AI546999, AI557533, AA585356, AI546875, AI547250, D55233, AI557763, AI547039, D61254, D53447, AI557734, C16292, C15120, C15762, D52835, AI526112, AI526117, D53472, AA585476, AI557408, AI541346, AI557602, AI557807, C16300, AI541013, C16296, AI525339, AI526024, C16293, AI557852, D30843, AI525306, AI547196, C16305, C15737, AI525302, AI541374, AI557155, AA585389, AI557317, AI526109, AI536138, AI547202, D60730, AI525168, AI557758, AI526146, AI546945, AI525431, AI526158, AI526191, AI541515, AI526194, AI540974, AI546921, AI541321, AI541307, AI525320, AI541492, AI546901, AI557279, AI557810, AI547140, Z30131, AI557808, AI541423, AI525856, AI526176, D57186, AI557264, AI541353, AI557799, AI541516, AI547189, AI546996, AI540967, AI546891, R29179, AI541402, AI547006, AI546829, AA585453, AI525114, AI526195, AI541422, AI557041, C14210, C14208, AI541527, AI525656, AI526169, AI557039, D61060, AI525076, AA585434, AI526113, R29262, R29172, C16290, AI524904, R29177, AI524891, AI541027, AI540944, AI556967, AI557786, AA585117, T19407, AI546954, AI525332, AI526073, AJ239433, AI547137, AA585420, AI557238, AI557796, AI541510, T41289, AA514191, AI524890, AI526187, AI557785, AI526205, AI540928, AI541506, AI541415, AI541075, AI547158, AI541345, AI541450, AI525286, AI546828, D51413, D51413, AI557082, T41329, D50992, AI526026, AI046024, AI547122, AI546841, AI540920, AI557802, AI557285, AI547026, AI547138, AI557543, AI541362, AI540882, AR062871, A25909, AR038855, X82786, Y09813, X76012, A85395, A70872, A70869, A85476, U94592, AR031358, AR031365, AR037157, U87250, AC005913, AJ243486, AR017826, AJ244006, AJ244005, Y16359, AF082186, AR038762, Z30183, AR003381, AF213384, X81969, Z32836, A62298, AR054723, D50010, D13509, AJ244004, X55486, A20702, AR062872, AR062873, A20700, D78345, A43189, A43188, AR050070, A82595, A82593, AR017907, AF006072, AJ244003, X82834, AF135243, AB005666, L36913, and AJ131952. |
| HNGDD73 | 4077 | 764596 | 1 - 452 | 15 - 466 | AC005390. |
| HNGDE07 | 4078 | 953858 | 1 - 239 | 15 - 253 | AF109718, AC004908, AC006328, AC004916, AC004842, and AL133216. |
| HNGDE31 | 4079 | 794124 | 1 - 382 | 15 - 396 | AL022098. |
| HNGDF48 | 4080 | 723368 | 1 - 147 | 15 - 161 | AC004914. |
| HNGDF72 | 4081 | 766217 | 1 - 315 | 15 - 329 | |

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| HNGDG86 | 4082 | 577237 | 1 - 310 | 15 - 324 | | |
| HNGDH09 | 4083 | 573022 | 1 - 364 | 15 - 378 | | |
| HNGDH37 | 4084 | 917254 | 1 - 201 | 15 - 215 | | |
| HNGDH52 | 4085 | 914629 | 1 - 422 | 15 - 436 | | |
| HNGDH96 | 4086 | 573060 | 1 - 427 | 15 - 441 | | |
| HNGDK17 | 4087 | 860684 | 1 - 351 | 15 - 365 | AA354141. | |
| HNGDK41 | 4088 | 574559 | 1 - 375 | 15 - 389 | U51561. | |
| HNGDL32 | 4089 | 935842 | 1 - 355 | 15 - 369 | | |
| HNGDL72 | 4090 | 574451 | 1 - 90 | 15 - 104 | | |
| HNGDL93 | 4091 | 927582 | 1 - 170 | 15 - 184 | | |
| HNGDO17 | 4092 | 973285 | 1 - 680 | 15 - 694 | | |
| HNGDP10 | 4093 | 968221 | 1 - 437 | 15 - 451 | | AW392414, AA721530, AA657910, R76962, AA362349, AL039309, AA211734, AA946848, R69527, H43771, AA714073, AA362348, AI471455, R87275, AI217131, II6221, AA429481, AA721523, AA483606, H84412, W63553, AI687343, AA570740, AA568204, AI306717, AW117723, H62550, AI130709, AI536858, AI537995, T69879, AA019003, AL041352, AW029269, AI368732, AI814682, AI758799, AI291439, AA488689, AI708152, R87883, AW190277, AW272640, AW117704, AA805848, AA355367, AA018923, AA012829, AA489240, AL037052, R33734, AW148775, AI298787, AI215784, AA831801, T40629, H67064, AI473671, U51704, Z95327, AF196970, AF141325, AL022311, AC007207, AC007201, AC005796, AC005829, AL035458, M31303, X94912, AC006360, U29874, AC007880, Z49235, AC002037, AC007707, AP000694, AC004817, AD000684, AC002128, Z83845, AL049733, AC006101, AC005828, AL121754, AC004491, AP000501, AC003667, AC003070, AP000030, AF030453, AC012039, AC005088, AC005237, AP000248, AI034549, AC005920, M87889, AP000065, AL049776, AC003690, AC000075, AC003072, AC000084, AC002491, AP000313, AC007199, AP000193, AL049843, AP000050, AL023877, AL034417, AC008044, AL023775, Z95115, AC002400, AC007993, AL031667, AP000117, AC005666, AL022721, AC008009, Y10196, AC008018, AP000347, Z98749, AC004815, AL022331, AC016831, AL049540, Z98051, Z93244, AC002351, AC005274, AC005201, AL022326, AC007161, U85195, AE000658, AL135879, AL121790, AC005081, AC004647, AC005480, AL031666, AL024508, Z73417, AC005914, AC005015, AL034402, AB020690, AC005328, AL031721, AF006487, AC006275, AC004257, AD000813, AF027974, AC005619, AC004611, Z82243, AC004694, AL021453, AC004814, AP000289, Z98743, AL031905, AC005773, AP000042, AP000110, AC004996, AI050341, AC004079, AC005663, AC004703, AC003983, Z95113, AC005924, AF196972, AC004941, AB017602, Z84466, AC005664, AL049759, AC005844, U52111, AC007276, AC008064, AL080243, AL022318, AC005261, AL049780, AL022318, AC006530, AC003101, U47924, AC000353, Z93241, U94776, AP001056, AL031728, AC005071, AC002477, AC007363, AL033249, AC006210, AL034420, AP001054, AC007429, AL031407, AL008725, AP000348, |

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| HNGDP13 | 4094 | 574484 | 1-452 | 15-466 | AF050154, AC002389, AC006388, AC002369, AL031594, AC004217, AL008583, AL031291, AL096678, AC007533, AC007358, AP001053, AC009946, AL133448, AC005516, AC004084, AL049575, AC004962, Z83851, Z85986, AF196779, AC000044, AC000034, AF003626, AC006055, AC006538, M89651, and AC006014. |
| HNGDP27 | 4095 | 574482 | 1-433 | 15-447 | A1962959. |
| HNGDP29 | 4096 | 574488 | 1-401 | 15-415 | |
| HNGDP30 | 4097 | 574480 | 1-351 | 15-365 | AC005866. |
| HNGDP71 | 4098 | 574481 | 1-348 | 15-362 | |
| HNGDP74 | 4099 | 860669 | 1-487 | 15-501 | |
| HNGDP89 | 4100 | 574478 | 1-389 | 15-403 | |
| HNGDP95 | 4101 | 574477 | 1-315 | 15-329 | |
| HNGDR19 | 4102 | 953672 | 1-376 | 15-390 | |
| HNGDR42 | 4103 | 657404 | 1-284 | 15-298 | |
| HNGDR79 | 4104 | 572904 | 1-248 | 15-262 | |
| HNGDR81 | 4105 | 572901 | 1-364 | 15-378 | |
| HNGDR88 | 4106 | 860666 | 1-311 | 15-325 | AC004408. |
| HNGDS04 | 4107 | 572909 | 1-533 | 15-547 | |
| HNGDS59 | 4108 | 576763 | 1-250 | 15-264 | AL035469. |
| HNGDS96 | 4109 | 796488 | 1-504 | 15-518 | |
| HNGDT36 | 4110 | 572895 | 1-400 | 15-414 | |
| HNGDU45 | 4111 | 722062 | 1-504 | 15-518 | AP000274, and AP000105. |
| HNGDV22 | 4112 | 572910 | 1-432 | 15-446 | |
| HNGDV25 | 4113 | 573152 | 1-287 | 15-301 | AF118808. |
| HNGDV59 | 4114 | 739407 | 1-98 | 15-112 | AC006166, AB023051, and AP000512. |
| HNGDV96 | 4115 | 796487 | 1-501 | 15-515 | AP000345. |
| HNGDW23 | 4116 | 576773 | 1-420 | 15-434 | |
| HNGDW62 | 4117 | 573162 | 1-290 | 15-304 | AP001054. |
| HNGDW95 | 4118 | 661943 | 1-488 | 15-502 | |
| HNGDX50 | 4119 | 860661 | 1-300 | 15-314 | |
| HNGDY12 | 4120 | 870390 | 1-585 | 15-599 | AC006263. |
| HNGDY14 | 4121 | 968042 | 1-258 | 15-272 | |
| HNGDY39 | 4122 | 572908 | 1-396 | 15-410 | AC005702, and AC003976. |
| HNGDY92 | 4123 | 920168 | 1-409 | 15-423 | AL033538. |
| HNGDZ52 | 4124 | 572865 | 1-348 | 15-362 | |
| HNGEA44 | 4125 | 572855 | 1-149 | 15-163 | |

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| HNGEA82 | 4126 | 778879 | 1 - 165 | 15 - 179 | AL021367. |
| HNGEA88 | 4127 | 578911 | 1 - 348 | 15 - 362 | AC002492, and AC002045. |
| HNGEB79 | 4128 | 576743 | 1 - 385 | 15 - 399 | Z97351. |
| HNGEB81 | 4129 | 572862 | 1 - 299 | 15 - 313 | AP000250, AP000030, AP000133, and AP000211. |
| HNGEB91 | 4130 | 924912 | 1 - 340 | 15 - 354 | |
| HNGEC02 | 4131 | 917530 | 1 - 987 | 15 - 1001 | AA585439, AI525328, AI525556, AI535639, AA585453, Z28355, AI541523, AI546855, AI541374, AI525316, AA585440, AI546999, AI525306, AI541514, Z30131, AI526140, AI556967, AA585101, AA585434, AI546899, AI541508, AI557807, AI541510, C15189, AI526194, AI525431, AI557084, AI546945, AA585356, AI541509, AI546828, AI541013, AI541365, AI526180, AI541535, AI547039, AI540967, AI557731, T11028, AI541017, AI535660, AI557799, AI557787, D61254, R29445, C16300, R28735, AI541307, AI536138, AL040625, AL045817, AL041142, AL041238, AL041133, AL047183, AL040322, AL041131, AL046330, AL041051, AL041292, AL040119, AL047036, AL047170, AL047057, AL047219, AL041227, AL040463, AL039915, AL043612, AL041197, AL040155, AL041346, AL040529, AL041096, AL047012, AL041358, AL041277, AL041163, AL040510, AL041098, AL040621, AL043538, AL041324, AL040464, AL044162, AL041086, AL043496, AL041296, AL041233, AI526196, AI526184, AL041159, AI045725, AL041140, AL040193, AL043467, AL044186, AI557262, AL044037, AL040091, AL040128, AL040168, AL040255, AL040285, AL040342, AI040553, AL040332, AL040617, AI045684, AL040745, AL040370, AL043677, AL046442, AL040839, AL040149, AL041752, AL043775, AL044165, T23985, AL043492, AL041602, AL045920, AL041278, AL038838, AL040253, AL044074, AL041635, AI546875, AI525321, AL045990, AL040458, AL044199, AL044187, AL040263, AL040090, AL040294, AL040329, AL040082, AL044272, AL041186, AL040148, AL041730, AL041523, AL043627, AL046392, AI541205, AL041374, AL040052, AL043845, AL039338, AL042135, AL044064, AL039316, AL043923, AL038983, AL043814, AL043848, AL041459, AL043570, AL041577, AI044201, AL044258, AL046850, AL038532, AL040768, AL037727, AL046994, AL040414, AI540920, AL040576, AL040571, AL046914, AI142134, AL045753, AL044274, AL079878, AL049018, AL040444, AA585476, AI526144, AL045857, AL039744, AI541345, D57491, AL038822, AL045671, AL046327, AL041168, AL049069, AL043444, AL041246, AL040472, AI557796, C16305, AL040238, T41289, AL041347, AL041955, T23957, AI525320, AL038761, AL040075, AI546891, AI535813, AL080031, AI526187, R29177, AL045989, AI526073, AL046147, AJ239433, AL042096, AL044529, AI541317, AI557802, AL037436, AL039643, AL039360, D55233, AL037435, R29218, T23888, AI557802, AL044125, AI557238, AI525653, AA174170, AI541415, AI541390, AL079852, AL040252, AL025339, AI525856, AI557155, AL045211, AI557727, AL043950, AL134123, AI541506, AI525856, D61185, AI557734, AI541534, R45895, AI557279, AL041210, AL037341, AI557740, AL023494, AR017907, I13349, A91965, X81969, I44681, I66485, I66487, AR008429, AR038855, AR062871, A25909, I66496, I66494, I66498, I66497, |

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| HNGEC06 | 4132 | 935840 | 1-303 | 15-317 | I66496, I66486, I66481, A85395, I66488, I66489, I66490, I66491, I66492, I66493, A83642, A83643, I66483, I66484, A85476, A83151, AR062872, AR062873, AF082186, AJ244004, AJ244005, AR037157, AJ244003, A20702, A20700, A43189, A98420, A98423, A98432, A98436, A98417, A98427, I63120, I18895, A98767, A93963, A93964, AR038762, Y16359, D78345, A84772, X83865, A84776, A84773, A84775, A84774, AR054109, AR067731, AR067732, A86792, A58522, A91750, AJ244007, A18053, M28262, A60212, I15717, A60209, A60210, A60211, I15718, E03627, I49890, I48927, A02712, A77094, A77095, I84553, A81878, A95051, I84554, A18050, A23334, A75888, I70384, A64973, A60111, A23633, AR007512, I08396, I00682, A11623, A11624, E00609, E13740, A11178, E01007, A10361, A35536, A35537, A02135, A04663, A02136, A04664, I06859, I08395, AR043601, I19525, A11245, I03331, A02710, E12615, AR035193, E14304, A07700, A13392, A13393, I62368, AR031488, I13521, I52048, A27396, AR027100, I44531, I28266, I21869, I44516, A70040, E16678, A82653, E16636, A93016, A24783, A24782, A92133, A95117, A58524, A58523, A90655, AF149828, I01995, I08051, AR031566, I25027, I26929, I44515, I26930, I26927, AR038066, A32110, I60241, I60242, A20699, E00699, E00696, E00697, E03813, AR009151, AR027099, AR051652, AR051651, U94592, I05488, I61310, Z32836, A60961, A60977, Y09813, D50010, AJ230935, A91752, I08196, AR028564, A68112, A68104, AJ230902, A06419, A21892, A23997, A68114, A89633, A89634, A60985, A21895, A60990, A47368, A05160, A08030, A20502, A60987, AR027319, I19516, I19517, A91751, A76773, AR027318, A22413, I05558, A29109, A32111, AR002333, I63560, AR009152, I63561, I63563, I07249, I08776, I15353, AR068508, AR068510, AR068509, A63954, I91969, AJ230972, I58322, I58323, AR003585, A38214, I25041, I56772, I95540, A95096, A95106, A95105, AR035975, AR035974, AR035977, AR035976, AR035978, AJ230951, A70872, X07299, AJ231009, I08389, A62298, A22738, D13316, A70869, D13509, AB025273, and A25246. |
| HNGEC41 | 4133 | 782294 | 1-433 | 15-447 | AL050321. |
| HNGEC43 | 4134 | 573040 | 1-425 | 15-439 | |
| HNGEC44 | 4135 | 806031 | 1-626 | 15-640 | |
| HNGEC75 | 4136 | 916809 | 1-619 | 15-633 | AI420921, and AI139760. |
| HNGED03 | 4137 | 924696 | 1-295 | 15-309 | |
| HNGED21 | 4138 | 920156 | 1-335 | 15-349 | AA501465. |
| HNGED77 | 4139 | 572868 | 1-358 | 15-372 | |
| HNGED91 | 4140 | 790309 | 1-450 | 15-464 | AL120191, H71450, AW339743, AI053560, AW302753, AW301906, AI144081, AW302711, AI953573, AI133727, AA514024, AL020993, AL109865, AC004671, AL118516, AL050332, AC006285, AC016025, AL031773, Z98743, AC004841, AC002418, AC004386, AL033380, ZA9250, AC005225, AF165138, Z84486, AC006080, AL022727, AC005945, AC005795, U66083, AL109963, AC000004, AL121852, Z94160, AC005150, AC002044, and AC004262. |

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| HNGEE18 | 4141 | 573018 | 1 - 308 | 15 - 322 | |
| HNGEE39 | 4142 | 573065 | 1 - 293 | 15 - 307 | |
| HNGEF58 | 4143 | 708692 | 1 - 338 | 15 - 352 | |
| HNGEG45 | 4144 | 572880 | 1 - 335 | 15 - 349 | |
| HNGEG74 | 4145 | 860685 | 1 - 404 | 15 - 418 | |
| HNGEG85 | 4146 | 784431 | 1 - 353 | 15 - 367 | |
| HNGEG86 | 4147 | 573049 | 1 - 273 | 15 - 287 | |
| HNGEI22 | 4148 | 967310 | 1 - 349 | 15 - 363 | |
| HNGEI47 | 4149 | 720471 | 1 - 439 | 15 - 453 | |
| HNGEJ04 | 4150 | 932199 | 1 - 239 | 15 - 253 | |
| HNGEI22 | 4151 | 573066 | 1 - 182 | 15 - 196 | |
| HNGEJ35 | 4152 | 934987 | 1 - 545 | 15 - 559 | F16345, AA353081, AI054090, AI251944, AW169469, AW243945, AA489897, AI358008, AI251024, AI246061, AA594705, AI376197, AI567941, AL119563, AI927393, AW275432, Z94161, AC005081, AC004386, AL023807, AL031255, AL050318, AC006064, U91326, AC005778, AC005822, AC005971, AC004674, AL022336, AC007216, AC007055, AL133246, U02051, AL080242, AF030453, AL080243, AF045555, AL022326, AC002425, U95742, AC005088, AC005200, AF001549, AL109628, AL049636, AC005015, AC004491, AL008582, AC007011, AL133396, AJ011930, AC002565, AC007406, AL031597, AC002357, AC005280, AC002504, AC002527, AC005527, AC003029, AC004148, AC003104, AC003966, AC005317, AC003982, AC002395, AP000689, AC006241, AC004913, Z85994, AC005796, AC004841, AC004922, AF001548, AC007283, AC007227, AL133163, AP000133, AP000211, AL021155, AL009183, Z73359, Y17293, AC005529, AC006274, AL132992, AL035587, AC006130, U95740, AL031846, L76568, AL023879, AC006126, AC007066, AC003957, AL049776, AJ003147, AC007050, AL050333, AP000355, AF001550, AL050307, AC006441, AC005049, AC007205, AC006530, AC002347, AC002991, AC004019, AC007191, AF047825, AP000690, AC022517, U85195, Z92542, Z84466, AC007371, AC004149, AC007312, AC004821, AE000658, AC007666, AL034549, AC007934, AC006121, AC006285, AL132712, AC005696, AD000812, Z99716, AC006544, AL022476, AC016025, AC004929, AC004883, AC009946, AC007225, U91323, AC004031, AC004213, AC005069, AF196969, AP000359, AL022163, AC004526, AL021808, AC006077, AC004383, AC007731, AC007308, AC005919, AF003626, AL049759, AP000493, AC004991, AC007239, AC005500, AC005562, AC004893, AP000255, AL034379, AL080313, AC005988, AC005755, AC005189, AC005516, Z84467, AP000549, AC004859, AC002470, AC002430, AL034420, Z68324, AL035071, AC005516, AC004797, AC007384, AL049540, AL117344, AC005993, AB022785, AF196779, AC004560, AF053356, Z83838, AL035422, and AP000228. |
| HNGEK30 | 4153 | 572864 | 1 - 263 | 15 - 277 | |

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| HNGEK44 | 4154 | 576745 | 1 - 442 | 15 - 456 | N21074, AW089204, AI433104, H67851, AA323110, AI061076, AL031273, AC016027, AC016830, AC004408, AC006344, AC009721, AC000353, AC003029, AL096774, Z86090, AC005231, AL049830, AC004522, AC005383, AC005901, AC008115, AC018767, AC004841, AC006277, AC003098, AC006141, AF111169, AC005730, AP000555, AC005229, AC002418, AC004386, AC004216, AC003982, AF141325, AL020997, AL021939, AC007688, AC006071, AL049776, AC005899, AC005004, AL033525, AC002492, and AL031291. |
| HNGEK68 | 4155 | 753159 | 1 - 328 | 15 - 342 | |
| HNGEL62 | 4156 | 958363 | 1 - 576 | 15 - 590 | T83534. |
| HNGEL92 | 4157 | 572867 | 1 - 359 | 15 - 373 | |
| HNGEM38 | 4158 | 573041 | 1 - 361 | 15 - 375 | |
| HNGEM53 | 4159 | 860643 | 1 - 388 | 15 - 402 | |
| HNGEN37 | 4160 | 663955 | 1 - 397 | 15 - 411 | |
| HNGEN45 | 4161 | 572876 | 1 - 350 | 15 - 364 | |
| HNGEP55 | 4162 | 732262 | 1 - 351 | 15 - 365 | |
| HNGEP61 | 4163 | 576749 | 1 - 296 | 15 - 310 | |
| HNGEP64 | 4164 | 860631 | 1 - 1144 | 15 - 1158 | AI583142, AC004491, AL022165, AL034549, AC005015, AC005585, AC004104, AC002352, U63721, AC002045, AC004997, AL020997, AC005089, AC005412, AC002554, AC002400, and AC007425. |
| HNGEP70 | 4165 | 572858 | 1 - 359 | 15 - 373 | |
| HNGEP75 | 4166 | 766574 | 1 - 422 | 15 - 436 | |
| HNGEP77 | 4167 | 861710 | 1 - 417 | 15 - 431 | H14806, AW410740, AI434025, AC009542, and AC009330. |
| HNGEP81 | 4168 | 778161 | 1 - 867 | 15 - 881 | |
| HNGEQ07 | 4169 | 953647 | 1 - 616 | 15 - 630 | AW407886, AW239264, and AR062112. |
| HNGEQ32 | 4170 | 572984 | 1 - 266 | 15 - 280 | AI092509. |
| HNGEQ67 | 4171 | 860687 | 1 - 297 | 15 - 311 | |
| HNGER25 | 4172 | 572873 | 1 - 85 | 15 - 99 | AL021921, and U95738. |
| HNGER43 | 4173 | 699391 | 1 - 302 | 15 - 316 | AC007563, AC000030, AL023095, Z93928, AC002523, AC005035, AF043945, and AL008634. |
| HNGER67 | 4174 | 578903 | 1 - 495 | 15 - 509 | AF104455. |
| HNGER82 | 4175 | 945838 | 1 - 625 | 15 - 639 | R16017, AA570454, R02443, R16118, T77361, R06273, and T77056. |
| HNGER84 | 4176 | 586451 | 1 - 355 | 15 - 369 | AI763088, AL135549, AC010385, AJ223814, AJ223777, X99326, and AF042089. |
| HNGER96 | 4177 | 922996 | 1 - 505 | 15 - 519 | |
| HNGES56 | 4178 | 733543 | 1 - 291 | 15 - 305 | |
| HNGES59 | 4179 | 490034 | 1 - 600 | 15 - 614 | F30908. |
| HNGES89 | 4180 | 573013 | 1 - 418 | 15 - 432 | |
| HNGET07 | 4181 | 953618 | 1 - 397 | 15 - 411 | |
| HNGET31 | 4182 | 506498 | 1 - 460 | 15 - 474 | |

| HNGET67 | 4183 | 953529 | 1 - 356 | 15 - 370 |
| HNGEU35 | 4184 | 853582 | 1 - 724 | 15 - 738 |

AL046457, AI826263, AA604333, AW402063, AA359347, AA101689, AW021583, AA679936, AA846952, AI963720, AL044441, AA502104, N48230, AI732120, AA507824, AI561060, AA487621, AI686267, AA680243, AI696955, AA707833, AA665021, AW080120, AA666052, AA126450, AA548058, AW070892, AW302013, AA773153, AW102849, R79698, AA745326, AI635279, F17149, AI811809, AA806796, AI733755, R40056, AL042753, AI499588, AA610777, AI669453, AA508034, AA250819, AA639173, AA713626, AW440497, AL119713, AC005015, AC005081, AL020993, AL121603, AC002425, AL022316, AL096791, AC005071, U95740, AC004983, AC004150, AC006312, AL022163, AC003080, AL024507, AC007551, AC005736, AL049569, AP000240, AC005037, AC007227, AC009399, AC006449, U95742, AF088219, AC004019, AC002365, AC002350, AC005839, AL035079, AL121694, AL031577, AL023807, AL031283, AC004638, AL034429, AC007243, AC006115, AC005585, AC002492, AC005231, AL096774, AC005102, AC004263, AL021155, AC006116, AF109907, AL035072, AC005486, AC009516, Z97053, AC002470, AC002565, AC005996, AF045555, AC007216, AL022721, AC005089, AC004675, AL049869, Z68870, AC004216, AF053356, AL109827, AC006057, AC004821, AC004876, AC016025, AC002395, AP000689, AC002070, AP000557, AC004491, AC007546, AL050318, AC002314, AC005722, U47924, AC002310, AC004990, AL132092, AC004966, AP000201, AP000555, AL132777, AC007384, Z83840, AC005666, AC005519, AC006271, AC006211, AC004882, Z82201, AC004859, AF031078, U80017, AP000097, AL121655, AC007510, AL035423, AC005041, AC004531, AC006241, AC006261, AC005527, AL009179, AC002472, Z85986, AC005914, AC004686, AC005031, AF030876, AC007207, AC007387, AC003982, AL035071, AF196969, AC007664, U91323, AC005154, AL031311, AL021546, AL034451, AC004815, AC003681, AC006948, Z84469, AC004841, AC006285, Z93017, AP000133, AP000211, AC002301, AC005829, AL050341, AL031767, U91326, AC007225, AC007999, AL035695, AC002072, AL031659, AP000556, U82671, AC004699, AP000553, Z95116, AC005899, AC008372, AC002430, AL022322, AL080243, AJ246003, AC004878, AC008101, AC006547, AL031680, AC006111, AL021807, AC006388, AL109984, AP000493, AC004929, AC002429, AC002316, AL022315, AC002563, AL035415, AC005291, AC004668, AC005480, AC002400, AC004972, AC005783, AL078477, AC007676, AC007011, AC006537, AC003108, AC007919, AL022311, AC005288, AL049759, AP000209, AP000131, AC000004, AC006080, AC002984, AF038458, Z83838, AC006965, AC007388, AC007686, AC005844, AC005180, AC005193, AC005821, AC007298, AC007845, AC004560, AL031594, AJ010770, Z83822, AC006023, AC005529, AB023049, AC006207, Z99716, AL023879, AL021154, AL023575, AC005632, AC007421, AC005778, AP000346, U85195, AC005162, AC012384, AC004598, AJ006345, AC005358, AL035089, AC005726, AC004905, AC004813, AL136295, AF064861, AL133246, AF205588, AL049795, AL031584, AC004671, AL031427, AC007324, AC006544, AL109801, AC011718, AC006480, and AL035659.

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| HNGEU37 | 4185 | 860626 | 1 - 134 | 15 - 148 | |
| HNGEV33 | 4186 | 781207 | 1 - 400 | 15 - 414 | |
| HNGEV34 | 4187 | 490914 | 1 - 517 | 15 - 531 | AA378548, and AC005071. |

AW275432, AA601376, AI791659, C15966, AL048969, AW151247, AA730872, AA761606, AI521525, AI090377, AW020150, AI224583, AA761714, AA719564, AI926102, R23873, AA573067, R42954, AA831426, AI613459, AA298365, AA501807, AI801563, AA586474, AA723132, AA493546, AA064983, AW270652, AA135761, C14614, AA504924, AI720671, AA174108, AA489390, AA525807, AW272389, AA565338, AA654705, AA661583, AA516242, AA470612, AA526542, AA297208, F23338, AA708751, AA555131, AW264548, AA503144, AI754421, AI879968, AA218684, AL134338, AA767558, AI309943, AA420787, AW008089, AA493245, AA350886, AA524604, AW194046, AW075296, D44672, AA738014, AA729350, AI049845, AI040313, AI910609, AA515165, AI678812, AI798521, AA084320, AA718906, AA984114, AA484892, AA808875, AI952885, AL079734, AI760835, AA420801, AA533176, AI635440, AII48245, AI804539, T15873, AI925423, AL042667, AL042670, AA669711, AI128353, AA056619, AA482725, AI567402, AA653221, AI986251, AA813902, AA765768, R43331, AA601333, AI431232, AC008585, AC005520, AL079295, AC006132, AF111168, AC005399, AC009247, AL049757, AC005519, AP000037, AL022281, AL117337, AC005632, AP000555, AC007226, AL022334, AL122023, AL031680, AL133371, AC006430, AC005696, Z98946, AC004583, AC005730, AC005839, AL031295, AF067844, AC004491, AL031670, AL049694, AC002470, AC006531, AL033527, AC007263, AC005754, AB023048, AC005736, AC006468, AC005291, AC002302, AC005921, Z77249, Z93241, AL109865, AC004815, AC005829, AP000691, AC005234, AC006006, AC008115, AC005215, AL031311, AC007040, AC006241, AP000511, AL034554, AC004999, AC006205, Z98743, AL035086, AC008040, AP000114, AP000046, AC002449, AC007065, AC008072, AP000765, AC004019, AC004834, AC007390, AL022313, AL121655, AC006480, AC006001, AC004673, AC004890, AC008154, AC005011, AC004408, AL133448, AC005768, Z83844, AC000353, AC004386, AC007021, AC006511, AL034379, AL121769, AC002301, AL049830, AC005841, U91323, AC004832, AL031283, AL034548, AC002553, AF134726, AF205588, AP000099, AC003043, AP000359, AC005933, AL049766, AL034347, AP000552, U91326, Z84466, AL031123, AL030995, AL049794, U82828, Z98884, AC005229, AC005920, AC002400, AC006958, AL022302, AC008123, AC018633, AC002544, AP000036, D84394, AC006285, U47924, Z85986, AC002492, AC007298, AL049872, AC005081, AL121658, AC005484, AC004081, AC006079, AC010205, AC003108, AC005071, AC004802, AL133246, AC006597, AL035420, AC006101, Z82201, AL024509, Z99716, AP000350, Z86090, AC006115, AL031643, AC003101, Z75890, AC007421, AC004605, AL031121, AC004895, AC003007, AC004686, L78833, AC005015, AL031120, AC004526, U91327, AC004638, AC005013, AC004000, AC005060, AC008498, AC005914, AL133321, Z81369, AC002310, AC004967, AC005261, AJ011930, Z95113, AF001550, AL031255, AC007917, AL035587, AB004907, AF053356, AL009181, AL096763, AC005924,

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| HNGEV38 | 4188 | 572882 | 1-313 | 15-327 | AC005776, AC005482, AL135744, Z85987, AC005695, AC004703, AC004762, AF047825, AC005042, AL133163, AL078581, AP000105, AC002115, AL078593, AC005157, Y18000, AC004933, AL031005, AL096703, AF129756, AL022336, AP001068, AC004659, AC004865, AC012384, AC007240, AC005694, AC005209, AC007934, AC006128, AL121603, AL034429, AL031781, AP000503, AC007057, AC007279, AC006509, AL032822, AC004883, AL035398, AC006146, AJ003147, AC005066, AC005041, AL035249, AC004805, AP000694, AL136295, AF207550, U95742, AC006538, Z97184, AC002546, AD000092, AL139054, AC004985, AC005746, AF111169, Z98051, AC005180, AL135783, AC005004, AC008044, AL022476, AC006163, AC005529, and AC002550. |
| HNGEV40 | 4189 | 572894 | 1-302 | 15-316 | AC006263. |
| HNGEV53 | 4190 | 573090 | 1-301 | 15-315 | |
| HNGEV59 | 4191 | 576750 | 1-305 | 15-319 | AA644587, AA135942, AA004231, AL044969, H30905, R01285, AI079521, R01173, and AC004223. |
| HNGEV65 | 4192 | 750391 | 1-585 | 15-599 | |
| HNGEV70 | 4193 | 573089 | 1-128 | 15-142 | |
| HNGEV75 | 4194 | 506312 | 1-246 | 15-260 | AL034429. |
| HNGEV86 | 4195 | 789128 | 1-89 | 15-103 | H23596, H40504, and H21110. |
| HNGEV88 | 4196 | 750542 | 1-326 | 15-340 | |
| HNGEW18 | 4197 | 958328 | 1-336 | 15-350 | |
| HNGEW76 | 4198 | 572874 | 1-276 | 15-290 | AA362395, AW051064, AI085439, W25284, AA652057, AA649642, AI446464, AA125788, AA348859, AL037876, H13868, AA441788, N71724, R91744, AA329192, AI886176, AI064864, AA095511, AW419262, R76463, AW088058, AW074207, AA654627, AA199660, AA826032, T62712, AI439360, AI623696, F24284, T90706, R45369, AA337978, AA058859, AA368030, AL048616, AA491814, AA147516, AI299050, AW406447, T56472, R93061, AI281903, AW192154, AI371429, N23649, AA332991, AI423625, AA650244, AA199798, F32705, AI003172, AW274101, AA598997, AL138455, AA713767, AA364315, H00934, AA218645, W60516, H72666, AA134367, W95976, W95841, W00796, T53607, AI184354, AI537955, AA318652, AA365347, AL048925, AA654771, AA501722, R24205, AA702023, AA342958, N25296, AW069481, AI925556, H22147, AA714453, AW083402, AA657918, AW021917, AA878140, N66026, AI612032, AA678436, AA557325, F25276, AA127636, AI499503, AI927741, F35659, AA587256, AA888310, AA340003, AA614069, AI049634, R76777, AI348611, D82290, AA309460, T06556, AL135405, R66878, N58534, AI305766, AI246796, AA879430, AW083364, AI926023, AA076632, AW103679, AW103383, AI709066, H16048, AA932099, AA489775, AA578141, H77643, AA581342, AA338522, AA919037, AA649705, AI863283, T16592, AA259245, AA733208, AA533725, R44592, W56200, AA021133, N29941, AW008317, |

AI963095, AA719805, AA377730, AI076616, AI336660, AA557686, AA080863, AI554289, AA057056, AI619997, AC006367, AC002390, AC007685, AC005332, AL049588, AF165175, AC006387, AF001549, U91327, AC009731, AC022517, AL031123, AP000350, AP001038, AL132642, AC002365, AL031904, AC004901, AL022162, AL031665, AL049633, AC004595, AL022302, AC005028, U85196, AE000661, AL031431, AL034419, AL008715, AC000389, AL121578, AL080248, AC006060, AL031655, AC004616, AC006571, AC005529, AL049692, AL023879, AC004804, AL109628, AC004664, AP001068, AL008723, AC002509, Z98049, Z82173, AC004933, AC005157, AL022396, AC006582, AL049833, AC006461, AC004690, AJ229042, AL023799, AC007358, AL022163, AF123462, AC005822, AC004659, AC006559, AJ011930, AL049798, AC004543, AC006019, AL049635, AC005874, AF134471, AC005291, AC007748, AL049836, AC003684, AC008064, AL133163, AC002076, Z96074, AL109847, AC007297, AL136501, AC004820, AL031732, AC005799, AL023754, AL034379, AL020993, AF165147, AC006352, AC005231, AC006359, AC005294, Z84467, AL023876, AL035692, Z97054, AC004593, AC006992, U95740, AL109952, AL009177, AC007051, AC004934, AL078615, AC007129, AC004191, AC005362, AC004226, AC006561, AC006063, AF108083, AC005553, AC005018, AC006556, AJ251973, AC006960, AC003664, AC005728, AC006536, AC007285, AL035420, AC004957, AL122023, AC007707, AC004864, AC004452, AC002981, AC007690, Y18000, AC002488, AC004448, AC005284, AL035258, AL117329, AF117829, AF051934, AP000517, AC005997, AL009179, AC004066, AC005293, AL031594, AC007091, AL139054, AC005486, AF017257, AC008149, Z99755, AF165926, AC006020, AC007157, AC000117, AL021940, AL031584, AF064857, AC004647, AP000493, AC018769, AF129107, AC006376, AL078601, AC002457, AC004911, AL078624, AC005544, AC005161, AL117694, AC004761, AL022069, AP000099, AC005158, AC006196, AC007681, AC007463, AL033392, Z97989, AC009498, AL132712, AP000432, AC004097, AL078621, AC004673, AC007543, AC003998, AL096861, AP000555, AC006602, AC007682, AC004825, AC004882, AC006525, AL137191, AC006356, Z82250, AL079306, AP000036, AL121754, AC004100, AC007656, AP000473, AC003691, AC004502, AC002072, AC005324, AL009031, AC007228, AC002326, L78810, AC005216, AC005537, AC007488, AC002377, AC005751, AC011592, AC05155, AC004769, AC004855, AL135783, AC004605, AP000688, AL031599, AC004025, AL022394, AC004582, AC007773, AC004862, AJ229041, AC003035, AC007298, AF205588, AC005681, and AL049176.

AL110505.

AF132033.

AL050310.

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| HNGEX06 | 4199 | 935838 | 1 - 528 | 15 - 542 | |
| HNGEX35 | 4200 | 959230 | 1 - 362 | 15 - 376 | |
| HNGEX76 | 4201 | 834919 | 1 - 323 | 15 - 337 | |
| HNGEX95 | 4202 | 572897 | 1 - 314 | 15 - 328 | |
| HNGEY41 | 4203 | 973310 | 1 - 534 | 15 - 548 | |
| HNGEY50 | 4204 | 676067 | 1 - 295 | 15 - 309 | |

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| HNGEY60 | 4205 | 920375 | 1 - 462 | 15 - 476 | |
| HNGEY80 | 4206 | 790222 | 1 - 414 | 15 - 428 | AC007252. |
| HNGEY84 | 4207 | 752239 | 1 - 467 | 15 - 481 | Z82195, AL049795, AP001039, AC005295, and AC004707. |
| HNGEZA5 | 4208 | 574462 | 1 - 405 | 15 - 419 | |
| HNGFA28 | 4209 | 774277 | 1 - 666 | 15 - 680 | |
| HNGFA39 | 4210 | 424813 | 1 - 471 | 15 - 485 | |
| HNGFA41 | 4211 | 952235 | 1 - 135 | 15 - 149 | |
| HNGFA67 | 4212 | 576719 | 1 - 305 | 15 - 319 | |
| HNGFA80 | 4213 | 963490 | 1 - 613 | 15 - 627 | C16718, AL041375, AI452836, AI090377, C16746, C16704, AA831426, AI797998, AI309943, AW338021, AA410788, AI431513, AI973173, AI474127, AI984168, AA558366, AA228778, AA503298, AI310670, AA721645, AI078409, AA599712, AW089625, AI627917, AI349130, AA747234, AI744905, AW163763, AA679946, AI921706, AW008184, AI338117, AI926706, AI283938, N54538, AI755214, AI754105, AA176604, AI355246, AI754421, AW151201, AI754567, AW275432, AI697239, AA703818, AI697242, AW194046, AA570740, AI192465, AA483606, AW190484, AI697235, R73744, H84412, AW272294, AI610737, AA829036, AI244127, AI310787, AI266359, AI280535, AA225406, AI371208, AA299589, AA019003, AI565126, AA405726, AI915081, AA584207, AW338035, N42508, AA584765, AA568204, AI635028, AA311535, N25079, AI299442, F30158, AI800426, AW337805, AI598056, H30475, AW023111, AA297666, AA489390, AI753887, AI243793, AI249688, AI285493, W60077, AI270647, AI537694, AL035977, AA845659, AI580260, AI453155, AI620992, AI828742, D44899, AI745116, AI469564, AA603400, AI433131, H73550, AI038304, AA856815, T49633, AI290405, AI039125, AA503019, AA501460, AI310464, AI056177, AI865213, AI521525, AI870453, T60666, AI858165, AI801695, H61754, AA581240, AA584484, AW084445, AI923052, U17576, Z93931, AI139054, AL031588, AL035587, AC009509, AL050307, AC003663, AC003042, AC005940, AL021453, AC007227, AC006501, AC005619, AP000211, AB003151, AC005839, AC007688, AC005919, AC005913, AC004383, AL031447, AC006597, AL009181, AC008101, AC004858, U85195, L43411, AC002310, AC002395, AL050348, AP000353, AC002425, AC006441, AC004605, AC005519, AP000133, AL022318, AF109907, AL133246, AC006511, AL022476, AC003041, I34294, AL133445, AL080243, AC005921, AL024507, AC007917, AC002550, AL035086, AC006241, AL008719, AC005071, Z95114, AC004448, AC006101, AE000660, AC004805, AC005207, AC006059, AC005670, AJ229041, AC000353, AC005527, AL031428, AL050312, AC007324, AC016027, AC007225, AC005255, AL109798, AL031622, AC009288, AC016830, AC005346, AC004211, AC005072, U95742, AL121754, AC004967, AP000210, AP000132, AC005914, L39891, AF002991, AC005529, Z84469, AC006317, AL022316, AC009247, AC007262, AL096791, AC007216, AC004811, AF045555, AC007021, AL022326, AC005201, AL133448, AC004223, Z95126, AC004699, U80460, AC008545, AC004706, U07563, |

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| HNGFB08 | 4214 | 959738 | 1 - 365 | 15 - 379 | AL022327, Z95152, AL049776, AC005369, AC004874, AC006210, AC005393, AC002375, AC005081, AL078471, AL109963, AL021579, AE000658, AL031584, AC005488, AC004707, AL109627, AL136295, AC004963, AC002477, AL121756, AC006251, AC002316, AL022323, AF207550, U91327, AL034379, AC004242, AL049575, X55448, AP000552, AC004966, AL022302, AC005215, Z98304, Z75890, AF196972, AL031846, AP000240, AC006132, AL049569, AP000688, AC004834, AL031295, AC005057, AF001550, AL049757, AC005971, AC005412, AF111168, AL121655, AC004992, AC008072, AC004598, AC004812, Z82178, AC007226, AL049758, AC004938, AL133243, AB015355, AL023281, AC002997, AF026069, AC005233, AL034417, AP001055, AL033375, AC003101, AC006449, AL035413, AL049780, AC005730, AL133371, AC005933, AP000501, AC006275, AC004673, AC005049, AF124731, AF019413, Z83838, Z92546, AL022336, AL049646, AC004659, AL008718, AC002394, Z83840, Z93241, AC007292, AL035400, AC004975, AC011718, Z78021, AC005280, AC008975, AC004033, AC004531, AC005900, AC007041, AC006930, AL031311, AL109827, AC005225, AC005778, AC007685, AP000152, AC008044, AC006455, AC005004, AL008726, AB023050, AC005578, AL031767, Z97989, D84394, AC006487, AC000111, AL008720, AC007899, AP000553, AC003684, AL008635, AC004929, AC002554, AC002312, Z82189, AC005279, AL133245, AL132826, AC005746, AC003982, AL009031, AC007999, L44140, AP000953, U82828, AC002326, AC006042, AC006252, and Z95327. |
| HNGFB52 | 4215 | 573575 | 1 - 325 | 15 - 339 | |
| HNGFB57 | 4216 | 868072 | 1 - 249 | 15 - 263 | |
| HNGFB74 | 4217 | 573024 | 1 - 160 | 15 - 174 | |
| HNGFC71 | 4218 | 573160 | 1 - 352 | 15 - 366 | |
| HNGFD63 | 4219 | 835997 | 1 - 458 | 15 - 472 | AW247389, R61195, AL034418, AL049776, AC002551, AC005920, AC007707, AP000321, AC004520, AC006441, AC007934, AC005291, AC003072, AL021578, AC002351, AC005520, AC002115, AP000087, AP000167, Z85994, AP000121, AC004882, AC005529, AL033392, AC005620, and AP000226. |
| HNGFD75 | 4220 | 823462 | 1 - 354 | 15 - 368 | |
| HNGFD85 | 4221 | 783467 | 1 - 394 | 15 - 408 | AL049871. |
| HNGFD96 | 4222 | 968248 | 1 - 544 | 15 - 558 | AA707443, H46169, and H51510. |
| HNGFF35 | 4223 | 805996 | 1 - 635 | 15 - 649 | |
| HNGFG22 | 4224 | 573084 | 1 - 398 | 15 - 412 | |
| HNGFG51 | 4225 | 725787 | 1 - 203 | 15 - 217 | |
| HNGFG57 | 4226 | 860595 | 1 - 326 | 15 - 340 | R06993, and AA779921. |
| HNGFG69 | 4227 | 926873 | 1 - 301 | 15 - 315 | |
| HNGFH94 | 4228 | 966118 | 1 - 522 | 15 - 536 | |

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| HNGFI06 | 4229 | 935828 | 1 - 415 | 15 - 429 | |
| HNGFI20 | 4230 | 578896 | 1 - 338 | 15 - 352 | |
| HNGFI32 | 4231 | 699398 | 1 - 334 | 15 - 348 | R98238, AC002306, and Z97192. |
| HNGFI81 | 4232 | 578892 | 1 - 402 | 15 - 416 | |
| HNGFJ27 | 4233 | 860591 | 1 - 382 | 15 - 396 | |
| HNGFK28 | 4234 | 544726 | 1 - 977 | 15 - 991 | |
| HNGFK44 | 4235 | 860589 | 1 - 255 | 15 - 269 | |
| HNGFL04 | 4236 | 572833 | 1 - 330 | 15 - 344 | |
| HNGFM50 | 4237 | 584729 | 1 - 392 | 15 - 406 | D83779. |
| HNGFM74 | 4238 | 578884 | 1 - 510 | 15 - 524 | |
| HNGFM79 | 4239 | 860585 | 1 - 287 | 15 - 301 | AL049836. |
| HNGFN21 | 4240 | 572821 | 1 - 368 | 15 - 382 | AA411753. |
| HNGFN56 | 4241 | 970740 | 1 - 337 | 15 - 351 | |
| HNGFN65 | 4242 | 576698 | 1 - 473 | 15 - 487 | |
| HNGFN96 | 4243 | 770209 | 1 - 281 | 15 - 295 | AI306717, AI281622, AI270177, AI417586, AI065031, AA374797, AI251576, AI306232, AW274191, AI583466, AI002863, AA831801, AI559583, AA443778, AI798521, AW084173, AA832016, AI298995, AA443771, AI275989, AA205911, AW243793, AA229012, AA229730, T40629, AW019964, AA657910, AI133083, AI338526, AI955029, AW341955, AW439703, AI357628, AI499376, AI066646, H86579, AI471476, AI267356, AW242279, AA287502, AA761966, AI755202, H16875, AA496309, AA346870, AA573000, H50725, AW377926, AW028376, AA018923, AI982994, AA012829, H73306, N23919, AA226260, AI860535, AI278211, AI560073, AA126475, AI624379, AW392414, AA017240, AW408596, AA572813, AA704806, AA640252, AC007182, AC007563, AC006958, AC008040, AC005046, AC006511, Z85987, AC012627, AC004216, AC006973, AL049838, AC003976, AL049758, Z99496, Z83826, AC004797, AL031985, AL033983, AL033527, AC005011, AC007225, AL078593, AF196970, AC007240, AC005697, AC006120, Z97054, AC005225, AC005004, AL035683, AL109847, Z98048, AF155238, AC005261, U52112, L47334, AL031280, AC006480, AC002390, AC003037, AC005632, AL096776, AC004067, U95740, AC004825, U50871, AL035252, AC005482, U91321, AC007376, AC007546, AC005057, AC004617, AC007050, AL117258, AC002375, AL031291, AL132992, AC004003, AP000248, AC007160, AC009501, AC010200, AC005534, AC006137, AC007327, AL121578, AL031681, AL133445, AC011456, AC005839, U82668, AP001058, L29074, AC005102, Z94056, AF117829, AP000344, AC006116, AP000011, AL031663, AC007283, AC005737, AL139054, AL109628, AL049869, AC006566, AF111168, AC007880, AC007536, AC003007, AC004975, AL024507, AC010206, AC006088, AC005366, AC005049, AL133355, AC005993, AL035420, |

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|---|---|---|---|---|---|
| HNGFO46 | 4244 | 935135 | 1 - 255 | 15 - 269 | AP000511, AL021937, AL096712, AF002993, Z86062, AC005048, AC004838, AC005593, AC003009, AC004817, Z82245, AL049631, AP000689, AC007368, AP000152, AC006040, AC006059, AB003151, AC003991, AC007312, AC006449, AE000659, AL034379, AC008119, AF111169, AC006388, Z95116, AC004814, AC004025, AL021154, AC004525, AC009946, AC009308, AL080243, AB023050, AC005207, AC002477, AC005095, AC006198, AC004103, AF055066, AL049766, AC007934, AF227510, AR036572, U91328, AC004832, AL049872, AL034582, AC005380, AC007263, AC004106, Z98941, AC004527, AL096703, AL022727, Z97055, AC004104, AL021918, Z84467, AC005233, AL035423, AC005878, AC004087, AL008987, AL096861, AP000692, AL035690, AL035551, AL049611, and AL035417. |
| HNGFO55 | 4245 | 572856 | 1 - 356 | 15 - 370 | |
| HNGFO81 | 4246 | 526792 | 1 - 261 | 15 - 275 | AC008981. |
| HNGFP02 | 4247 | 920483 | 1 - 336 | 15 - 350 | |
| HNGFP08 | 4248 | 959730 | 1 - 362 | 15 - 376 | AL008720. |
| HNGFP62 | 4249 | 573052 | 1 - 341 | 15 - 355 | |
| HNGFP80 | 4250 | 931021 | 1 - 359 | 15 - 373 | AC006453. |
| HNGFP93 | 4251 | 707332 | 1 - 347 | 15 - 361 | AC007136. |
| HNGFQ36 | 4252 | 703715 | 1 - 358 | 15 - 372 | |
| HNGFQ58 | 4253 | 576715 | 1 - 483 | 15 - 497 | |
| HNGFR02 | 4254 | 920482 | 1 - 310 | 15 - 324 | |
| HNGFR16 | 4255 | 573358 | 1 - 357 | 15 - 371 | U51560, and Z80896. |
| HNGFR48 | 4256 | 860245 | 1 - 481 | 15 - 495 | H80158. |
| HNGFR73 | 4257 | 646263 | 1 - 469 | 15 - 483 | |
| HNGFR80 | 4258 | 576713 | 1 - 422 | 15 - 436 | |
| HNGFR85 | 4259 | 572838 | 1 - 373 | 15 - 387 | AC004605. |
| HNGFS46 | 4260 | 573094 | 1 - 403 | 15 - 417 | |
| HNGFS58 | 4261 | 932396 | 1 - 315 | 15 - 329 | |
| HNGFS71 | 4262 | 572828 | 1 - 328 | 15 - 342 | Z68225. |
| HNGFT19 | 4263 | 671599 | 1 - 555 | 15 - 569 | AL031055. |
| HNGFT77 | 4264 | 772335 | 1 - 396 | 15 - 410 | |
| HNGFU12 | 4265 | 971170 | 1 - 412 | 15 - 426 | AL050337. |
| HNGFU28 | 4266 | 860576 | 1 - 260 | 15 - 274 | |
| HNGFU40 | 4267 | 559450 | 1 - 355 | 15 - 369 | |
| HNGFV03 | 4268 | 924670 | 1 - 197 | 15 - 211 | AC005155. |
| HNGFV32 | 4269 | 806047 | 1 - 409 | 15 - 423 | |
| HNGFW09 | 4270 | 924693 | 1 - 327 | 15 - 341 | |

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| HNGFW15 | 4271 | 578901 | 1 - 206 | 15 - 220 | |
| HNGFW31 | 4272 | 578864 | 1 - 317 | 15 - 331 | |
| HNGFW82 | 4273 | 839957 | 1 - 230 | 15 - 244 | Z68756. |
| HNGFW96 | 4274 | 959715 | 1 - 461 | 15 - 475 | |
| HNGGA08 | 4275 | 959637 | 1 - 294 | 15 - 308 | |
| HNGGA10 | 4276 | 964820 | 1 - 364 | 15 - 378 | |
| HNGGA20 | 4277 | 764502 | 1 - 435 | 15 - 449 | AC006160. |
| HNGGA40 | 4278 | 506337 | 1 - 343 | 15 - 357 | |
| HNGGA44 | 4279 | 577362 | 1 - 248 | 15 - 262 | AC005220. |
| HNGGA53 | 4280 | 576212 | 1 - 417 | 15 - 431 | AC002288, AC004111, AC007130, AC003950, Z84487, AC005514, AC004905, AC003036, AC007030, AC005265, AL023807, AP000353, and AC022517. |
| HNGGA90 | 4281 | 572869 | 1 - 352 | 15 - 366 | |
| HNGGB09 | 4282 | 881399 | 1 - 671 | 15 - 685 | |
| HNGGE10 | 4283 | 964821 | 1 - 320 | 15 - 334 | |
| HNGGE38 | 4284 | 576217 | 1 - 123 | 15 - 137 | AC004583, and AC002041. |
| HNGGF02 | 4285 | 840277 | 1 - 289 | 15 - 303 | |
| HNGGF03 | 4286 | 924587 | 1 - 371 | 15 - 385 | |
| HNGGF06 | 4287 | 935709 | 1 - 361 | 15 - 375 | AC008124. |
| HNGGF26 | 4288 | 577369 | 1 - 212 | 15 - 226 | |
| HNGGF57 | 4289 | 576256 | 1 - 364 | 15 - 378 | |
| HNGGG02 | 4290 | 920379 | 1 - 386 | 15 - 400 | AF048728. |
| HNGGG10 | 4291 | 964818 | 1 - 296 | 15 - 310 | |
| HNGGG15 | 4292 | 576294 | 1 - 314 | 15 - 328 | |
| HNGGG18 | 4293 | 506304 | 1 - 318 | 15 - 332 | |
| HNGGG22 | 4294 | 576267 | 1 - 263 | 15 - 277 | |
| HNGGG25 | 4295 | 679153 | 1 - 99 | 15 - 113 | |
| HNGGG26 | 4296 | 576298 | 1 - 320 | 15 - 334 | |
| HNGGG50 | 4297 | 576295 | 1 - 372 | 15 - 386 | |
| HNGGG56 | 4298 | 733510 | 1 - 297 | 15 - 311 | |
| HNGGG63 | 4299 | 576296 | 1 - 365 | 15 - 379 | |
| HNGGG76 | 4300 | 576231 | 1 - 359 | 15 - 373 | |
| HNGGH38 | 4301 | 582695 | 1 - 330 | 15 - 344 | H73720, AP000555, AL049588, Z85986, AC006130, AC005089, AL031282, AC006441, and U81831. |
| HNGGH48 | 4302 | 576705 | 1 - 349 | 15 - 363 | |
| HNGGH57 | 4303 | 576278 | 1 - 172 | 15 - 186 | |
| HNGGH64 | 4304 | 860426 | 1 - 410 | 15 - 424 | |

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| HNGGH74 | 4305 | 577192 | 1-332 | 15-346 | |
| HNGGH78 | 4306 | 924908 | 1-419 | 15-433 | |
| HNGGH95 | 4307 | 576214 | 1-330 | 15-344 | |
| HNGGI08 | 4308 | 959639 | 1-316 | 15-330 | |
| HNGGI52 | 4309 | 576270 | 1-352 | 15-366 | |
| HNGGI58 | 4310 | 825371 | 1-103 | 15-117 | |
| HNGGI81 | 4311 | 830081 | 1-274 | 15-288 | H65090. |
| HNGGK31 | 4312 | 576259 | 1-58 | 15-72 | |
| HNGGK53 | 4313 | 576253 | 1-296 | 15-310 | |
| HNGGK86 | 4314 | 576247 | 1-313 | 15-327 | AL023803. |
| HNGGK94 | 4315 | 576255 | 1-295 | 15-309 | |
| HNGGL51 | 4316 | 576758 | 1-330 | 15-344 | |
| HNGGM10 | 4317 | 964819 | 1-568 | 15-582 | AC007766. |
| HNGGM41 | 4318 | 576284 | 1-356 | 15-370 | |
| HNGGM56 | 4319 | 576219 | 1-356 | 15-370 | |
| HNGGM67 | 4320 | 576220 | 1-367 | 15-381 | |
| HNGGM76 | 4321 | 576287 | 1-286 | 15-300 | AC005777. |
| HNGGM92 | 4322 | 576229 | 1-295 | 15-309 | |
| HNGGN03 | 4323 | 924578 | 1-347 | 15-361 | AC005325. |
| HNGGN04 | 4324 | 576263 | 1-267 | 15-281 | AC006536. |
| HNGGN16 | 4325 | 576268 | 1-302 | 15-316 | |
| HNGGN36 | 4326 | 708119 | 1-199 | 15-213 | AW029269, AA077796, AI131261, H52283, AA496309, AI720943, AA666272, AA809179, AI417586, AW162303, AA629852, AW162047, AW161786, H86579, H30595, AA018923, AA012829, AI306717, H77442, W63553, T40629, AW084173, AW019964, AL038813, AI860535, AA946848, T06897, AI955029, AI332676, H30568, AW167909, AI357628, AI066646, AL037006, AI471476, AI475164, AW130427, AI755202, AA657910, R91633, AI833218, AL039309, AA424249, AI252828, AI254153, H79407, AI902426, AI254937, AA761036, AA774006, AI270149, AI251380, AI251949, AI252207, AA429481, AI251996, AI252979, AI254626, AI284684, AI251353, AI251298, AI255012, AI459866, AI254440, AW082076, AI251598, AI252933, AI223508, AI254658, AI241970, AW086319, AA665123, AI246059, AI255003, AI254673, AW086334, AI251976, AC004009, AL008715, AC008009, AC005881, U73330, AC002347, AL117258, AF111169, Z95331, Z83851, AC005765, AC000134, AC004801, AP001054, U47924, AC006312, AL049575, Z98946, AL022316, AC004797, Z93241, Z98044, AF042089, AL035685, AL008582, AC007981, Z83826, AC007993, AC015853, AC004542, Z98304, AP000052, AL023581, AC005190, AC005884, AC008372, AC005821, AL050318, AC005519, AC006057, AC006317, AC006317, AC005666, Z75890, AP001050, AL023281, AL049570, |

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| HNGGN64 | 4327 | 577319 | 1 - 413 | 15 - 427 | AC009330, AC005235, AC005332, AC006255, AP000167, AC007528, AC005300, AL022314, AC007686, AL022162, AF095901, AC007934, AC005058, AL050307, AL035415, AL109627, AC006121, AL022238, AL031597, Z69653, AC006367, AC005529, AC006946, AL032821, AC006014, AC002477, AC004858, AC006050, AC007878, AF139658, AC003972, U95737, AC002094, AC006581, AC007225, AL049759, AC005488, AC008928, AL078600, AC002543, AC004895, Z83844, AC005510, AL031121, AL022326, AC006538, AC005606, AL079300, AC005480, AC004230, AL035588, AC007731, AC006950, AC005593, AC004685, AL034423, AL109984, AL021940, AC009542, AC007327, AC005089, AC006960, AC005358, Z99716, AC005197, AC002289, AL031906, AC002115, AC006141, AC004982, AL035414, AC004033, AC005520, AC005041, AC005500, AC006238, AF109907, AC005865, Z99128, AC008044, AL022313, AC004841, AC004882, AC002544, U90093, AC004491, AC007367, AC007435, AF196970, AC006111, AP000252, AL035072, AC004596, AP000134, AP000212, AP000030, AL109939, AC004796, AF030453, AC009247, AL009181, AC004896, AC002350, AC010170, AC006947, AC006515, AC004760, AC004617, AC004812, AJ003147, AL031721, and Z82244. |
| HNGGN94 | 4328 | 967253 | 1 - 304 | 15 - 318 | AC004592. |
| HNGGO01 | 4329 | 916754 | 1 - 432 | 15 - 446 | AL022315. |
| HNGGO14 | 4330 | 860246 | 1 - 314 | 15 - 328 | AL031279. |
| HNGGO25 | 4331 | 576277 | 1 - 308 | 15 - 322 | AC006013. |
| HNGGQ31 | 4332 | 576238 | 1 - 394 | 15 - 408 | H71828, H71829, R97233, and R97234. |
| HNGGQ41 | 4333 | 712426 | 1 - 672 | 15 - 686 | AB014078, AP000514, AC004209, and AC006139. |
| HNGGQ65 | 4334 | 576249 | 1 - 134 | 15 - 148 | AL031033. |
| HNGGQ89 | 4335 | 577327 | 1 - 324 | 15 - 338 | AA292029, H71258, H49211, T81141, R81151, AW085137, N58701, AA814092, AW244149, AC003007, AF001549, AC002045, AL078613, Z98200, AC006000, and Z96074. |
| HNGGR01 | 4336 | 916753 | 1 - 843 | 15 - 857 | |
| HNGGR10 | 4337 | 964815 | 1 - 241 | 15 - 255 | |
| HNGGR17 | 4338 | 576250 | 1 - 215 | 15 - 229 | |
| HNGGR43 | 4339 | 576246 | 1 - 433 | 15 - 447 | |
| HNGGR74 | 4340 | 765698 | 1 - 244 | 15 - 258 | |
| HNGGS09 | 4341 | 970861 | 1 - 386 | 15 - 400 | |
| HNGGS26 | 4342 | 825369 | 1 - 398 | 15 - 412 | AC005630, AC006328, AC004460, AC005154, and AC006312. |
| HNGGS33 | 4343 | 576305 | 1 - 414 | 15 - 428 | |
| HNGGS41 | 4344 | 576308 | 1 - 64 | 15 - 78 | |
| HNGGS66 | 4345 | 576312 | 1 - 401 | 15 - 415 | |
| HNGGS67 | 4346 | 751781 | 1 - 248 | 15 - 262 | |
| HNGGS73 | 4347 | 576740 | 1 - 391 | 15 - 405 | AL034548, and AL035467. |

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|---|---|---|---|---|---|
| HNGGS78 | 4348 | 576311 | 1 - 349 | 15 - 363 | |
| HNGGT44 | 4349 | 576297 | 1 - 313 | 15 - 327 | |
| HNGGT46 | 4350 | 719127 | 1 - 307 | 15 - 321 | |
| HNGGT55 | 4351 | 576302 | 1 - 350 | 15 - 364 | |
| HNGGT57 | 4352 | 576301 | 1 - 246 | 15 - 260 | AC006212. |
| HNGGT58 | 4353 | 576299 | 1 - 362 | 15 - 376 | |
| HNGGT62 | 4354 | 725750 | 1 - 117 | 15 - 131 | |
| HNGGV07 | 4355 | 953549 | 1 - 276 | 15 - 290 | |
| HNGGV55 | 4356 | 576313 | 1 - 286 | 15 - 300 | |
| HNGGV70 | 4357 | 781247 | 1 - 497 | 15 - 511 | |
| HNGGV95 | 4358 | 795920 | 1 - 423 | 15 - 437 | AA486885, AA582911, AA644207, AA522942, AA873560, AA523815, AA487858, AA595825, AW088202, R95704, AW104748, AA196796, AA719080, AA480790, AA488573, R91159, AA620464, AW080134, AW162049, AA504871, AI929531, AI339850, AI469003, AL038785, AI962050, AI567674, AA111909, AW440836, AI570261, AI133636, AW029038, AA713815, AI625244, AA482711, AA634146, AI679782, AI251436, AA634145, AI251002, N22018, AA496260, AA837084, AA483068, AI890923, AW166815, AA115968, AI917271, AA550758, AA531372, AI049722, AL120674, C06458, T08438, AA768905, AA348929, AI368745, U51696, AA151980, AA767376, AA729721, AI608626, AA190911, AI918421, AA312845, AA113186, C05755, T94075, AA159052, AA132833, C06327, AA099892, AL119391, AA192470, R23229, AA045894, AA714055, AW131034, AA826303, AA923516, AW088616, AA515051, AA663486, AA533725, H78195, AA810370, R79819, H85382, AA079707, AI904894, F17761, AI281468, AA593247, AA678436, AI499134, AA652764, H04276, AI358571, AW075511, AW300625, AA340747, AA303161, AA604854, AA548689, AI362368, AA861959, AI446464, AA846936, AA573020, AA837677, AA670468, AA493708, AA623002, AA492166, AA133130, AA670158, AA583955, AW419118, F09736, AA521399, AA252763, AW079659, AA194761, AA525824, AA856858, AA491284, AA554319, T56472, AA709005, AA630025, AA906889, AA682912, AI298710, AA649705, AW439558, AA171416, AA721981, H43312, N55273, AA521323, AA644538, AA577906, AA469451, AI064864, AI610159, T52733, AA603156, AA069022, R97934, N25296, AI278997, AA346458, T07451, F29989, AA708352, AA599920, AI365988, AW406755, AA156538, AA280632, AA630030, AA490183, AA765170, AA079101, AW193432, AA483223, AI982525, AI471543, AA602528, AI547286, T53128, AI471481, AA644551, AA551503, AA635442, AA654771, AA970213, AA654761, AA352803, AA324164, AA653618, AA834755, AA338486, AI284640, AA370035, AA664015, AL046409, AI358229, T15897, AA604869, T28550, AA350859, D57369, AI061334, AA491814, AA679514, N59782, AA143516, AA720548, AI568678, AI754955, W79504, AI859742, AA115165, AA199616, AA633582, AA446657, N38987, AA825455, R88421, AA569214, AA973803, AA134335, AA302963, AI299050, AA668578, AL041412, AA284179, AI358343, AA828042, AA513972, AA503283, |

H79151, AA113861, AA781010, AI801600, AI679045, AI708009, AA804379, AA649642,
H02877, AA568778, AA199853, AA610491, AI683577, C75026, T29180, AI281881, AA394271,
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AA713715, AA993656, AA639248, AA584881, AC010582, AC005585, AC007628, AC005484,
AC007239, AC007542, AL034451, AL021578, AP000352, AC006518, AP000157, AP000014,
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AC004832, AP000695, AF015166, AL033381, M63543, M63544, AC007911, AB020874, U91327,
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AF015170, AC005144, AC004934, AC009509, AC004542, AC004638, AC004408, AC002094,
AC016026, AP000500, AF031078, AF030876, AF045555, U12580, AL021878, AF055066,
AC005081, U89335, S75337, AC002067, U14695, AC006222, AC004458, AL049777, AC005772,
Z97196, AF015162, U12582, X67277, AC005164, U50871, Z82214, AC005722, AC004861,
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AC007436, AC002477, AC008055, U12583, U50570, U14698, AC008126, AC004019, AC006352,
AC005520, AC004692, AL031904, AC005552, AP000519, AC005511, AL049633, AF015169,
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AL022576, AC004613, S75201, Z99297, AC004593, AL035089, AC005399, A39972, AC007845,
AC005694, AC006285, AC002431, AL096829, U14700, AL031653, AC002059, AP000193,
AP000050, AP000311, Z73986, AL034400, AL049589, AP000117, Z99758, AC004885,
AF015165, AC005527, AC005495, AC008062, AC005156, AC007558, AC004915, AC016025,
AC007056, AC007193, U14719, AC005999, AL078603, AC005207, AC006150, AF164343,
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AL049764, AC007250, Z68328, AL022157, AL022393, AL031905, AP000156, AL035695,
AL049642, Z82211, AC004027, AC006011, AL135746, U12584, AC006548, AC002449,
AP000080, AC007245, AF029308, AC005503, AC000372, AL035415, AF196779, AL117353,
AC004825, AC003998, AL050318, U14712, AC006441, AL109842, AL031770, AC005901,
AC007156, U12581, AL049869, Z84470, AL022477, X58156, AC006597, AC005091, AC004796,
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AC005084, AC005018, AC000062, AC007870, AC004103, AC004592, L29074, M63005,
M63480, AC007565, AC007360, AP000093, and AL008633.

AC006482.

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| HNGGX46 | 4359 | 868071 | 1 - 327 | 15 - 341 |
| HNGGX49 | 4360 | 860551 | 1 - 318 | 15 - 332 |
| HNGGX91 | 4361 | 576188 | 1 - 266 | 15 - 280 |

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|---|---|---|---|---|---|
| HNGGX93 | 4362 | 576193 | 1-263 | 15-277 | Z64732. |
| HNGGX95 | 4363 | 576222 | 1-279 | 15-293 | |
| HNGHA08 | 4364 | 953539 | 1-399 | 15-413 | |
| HNGHA10 | 4365 | 860553 | 1-584 | 15-598 | AC005304. |
| HNGHA47 | 4366 | 576213 | 1-337 | 15-351 | |
| HNGHA70 | 4367 | 576300 | 1-378 | 15-392 | AA601995, AA565285, AW151732, AA551798, AC006960, AC002119, AF064860, AC005988, AC008372, AC005738, AB001523, AC006480, AL035658, AL096712, AL121655, AC003075, AC004259, AC004600, AP000558, AC006017, AC005089, AL021391, AC009516, AL096794, AL121603, AL034343, AC003681, AC004231, Z82244, AL021877, AL035464, AC005730, AC007371, AB000882, AC006445, AL031289, AL020997, AC006111, and AC005914. |
| HNGHA77 | 4368 | 772279 | 1-447 | 15-461 | |
| HNGHB07 | 4369 | 860552 | 1-372 | 15-386 | |
| HNGI1B31 | 4370 | 576306 | 1-537 | 15-551 | AA458724. |
| HNGHB33 | 4371 | 506261 | 1-128 | 15-142 | |
| HNGHB48 | 4372 | 463007 | 1-625 | 15-639 | |
| HNGHB55 | 4373 | 733509 | 1-506 | 15-520 | AL132987. |
| HNGHB80 | 4374 | 576769 | 1-517 | 15-531 | AI920851, AA338474, T27234, AA326098, AW317023, R68640, AI818313, AA829693, AA370883, AA366269, AC006255, AC002350, AC007052, AF111167, AC009891, AL117258, Z75890, AL023281, AF179633, AL035470, AC002289, AL035698, AC006409, AL050321, Z99128, AP000210, AP000132, AC006101, AL133246, AF152365, AC003045, AP000300, AP000045, AP000113, AC002543, and AC005027. |
| HNGHB91 | 4375 | 576215 | 1-515 | 15-529 | |
| HNGHD04 | 4376 | 932099 | 1-327 | 15-341 | |
| HNGHD09 | 4377 | 860544 | 1-394 | 15-408 | U91326, and AC002544. |
| HNGHD22 | 4378 | 576314 | 1-303 | 15-317 | Z83733, and AL049749. |
| HNGHD25 | 4379 | 506262 | 1-306 | 15-320 | |
| HNGHD59 | 4380 | 836226 | 1-344 | 15-358 | |
| HNGHD67 | 4381 | 576317 | 1-430 | 15-444 | AC004520. |
| HNGHE07 | 4382 | 953540 | 1-333 | 15-347 | |
| HNGHE17 | 4383 | 576209 | 1-330 | 15-344 | |
| HNGHE52 | 4384 | 576197 | 1-312 | 15-326 | AC002038, AC006352, AC002041, AP000543, AC006359, and AC002307. |
| HNGHE56 | 4385 | 577124 | 1-344 | 15-358 | |
| HNGHE62 | 4386 | 576202 | 1-266 | 15-280 | AA864653, AI089093, AI470199, AA757250, AI038529, AA654837, H12636, AI612981, T61868, AA012846, AI658809, AA582114, AA115234, AA115354, AC004972, AL021330, Z93018, AC006924, AC006020, AL031684, AL121866, AL021182, Z70719, AC008013, AB023048, AP000511, AC002072, AF027598, Z82200, AC004474, AL034485, AL022153, AC007165, |

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|---|---|---|---|---|---|
| HNGHE69 | 4387 | 753107 | 1-503 | 15-517 | AC002527, AL021939, U78308, AC005864, U76377, AL023878, AL079300, AF095725, AL078599, AC019014, AL009029, AC009946, AL109659, AC005908, AC006952, Z74409, AC003015, AC002299, AC007685, AL033504, AC004103, AC004947, AC007159, AC004099, AL121593, AC006961, AC006036, AC005084, AC006432, AC005832, AL022154, AL031116, AC002067, U95743, AF003627, Z98046, AL133353, AC005875, AC005247, AC002122, AB020871, AP000695, AC007262, AP000696, AC004014, AC005048, AC006478, AL022401, AL035660, AL033521, AC005771, E05591, E05593, E05595, D10871, AL109830, AL021307, and AC004125. |
| HNGHE95 | 4388 | 779951 | 1-198 | 15-212 | AP000024. |
| HNGHG15 | 4389 | 971736 | 1-382 | 15-396 | |
| HNGHG22 | 4390 | 577414 | 1-326 | 15-340 | AC005033, and AC006544. |
| HNGHG56 | 4391 | 576230 | 1-353 | 15-367 | AC004536. |
| HNGHG68 | 4392 | 576232 | 1-334 | 15-348 | AC002351. |
| HNGHG71 | 4393 | 576218 | 1-346 | 15-360 | |
| HNGHJ26 | 4394 | 924570 | 1-379 | 15-393 | |
| HNGHK13 | 4395 | 577354 | 1-334 | 15-348 | |
| HNGHK42 | 4396 | 582685 | 1-301 | 15-315 | |
| HNGHK44 | 4397 | 576208 | 1-281 | 15-295 | AL050342. |
| HNGHK46 | 4398 | 576205 | 1-308 | 15-322 | |
| HNGHK48 | 4399 | 576206 | 1-320 | 15-334 | |
| HNGHK50 | 4400 | 576195 | 1-364 | 15-378 | |
| HNGHK53 | 4401 | 576191 | 1-343 | 15-357 | AL034343. |
| HNGHK68 | 4402 | 576207 | 1-192 | 15-206 | AC006120. |
| HNGHK77 | 4403 | 772277 | 1-482 | 15-496 | |
| HNGHL10 | 4404 | 964814 | 1-352 | 15-366 | |
| HNGHL20 | 4405 | 973969 | 1-550 | 15-564 | AC000067, AL021332, AL034548, AF064860, AC010197, and U95740. |
| HNGHL22 | 4406 | 576326 | 1-363 | 15-377 | AI052117, AI057562, AI369836, AI360398, R84933, AI289003, AI870646, AA767953, AI672430, AW274266, and AI926637. |
| HNGHL51 | 4407 | 576223 | 1-221 | 15-235 | Z54246. |
| HNGHL52 | 4408 | 576226 | 1-414 | 15-428 | |
| HNGHL65 | 4409 | 576320 | 1-243 | 15-257 | AC005375. |
| HNGHL76 | 4410 | 506269 | 1-348 | 15-362 | AC005953. |
| HNGHL77 | 4411 | 772283 | 1-293 | 15-307 | |
| HNGHM33 | 4412 | 576741 | 1-302 | 15-316 | |
| HNGHM36 | 4413 | 576325 | 1-355 | 15-369 | |

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|---|---|---|---|---|---|
| HNGHM51 | 4414 | 713805 | 1-394 | 15-408 | |
| HNGHN22 | 4415 | 421742 | 1-433 | 15-447 | AL034402, and AL049871. |
| HNGHN40 | 4416 | 576165 | 1-244 | 15-258 | |
| HNGHN42 | 4417 | 576111 | 1-237 | 15-251 | |
| HNGHN52 | 4418 | 576681 | 1-341 | 15-355 | AA393776, AI149821, AI339278, AA436071, AI125367, and AA397838. |
| HNGHN56 | 4419 | 733881 | 1-416 | 15-430 | AI183881, AI085895, AW014092, AL023656, AL121588, AL132826, AL035090, Z94722, AL008627, AL021877, and AL033381. |
| HNGHN70 | 4420 | 576108 | 1-434 | 15-448 | |
| HNGHN75 | 4421 | 576110 | 1-427 | 15-441 | |
| HNGHN76 | 4422 | 576170 | 1-218 | 15-232 | |
| HNGHN86 | 4423 | 785566 | 1-203 | 15-217 | AA456578, AI471887, AI198588, AA635739, AL042757, AI873761, AA478355, AA226715, AI955807, AA452832, AA493695, W01230, AA610491, AA584876, AI110688, AA493975, AW084466, AW275510, AA634889, N49368, AI687343, AI308402, AI700109, AI120086, AL119984, AI345157, AW089625, AA372481, AA702729, AW002350, AI133297, AW069769, AI278087, AI953275, AA279421, AI635819, AA808877, AL046409, AI431303, AW302903, AW263415, AA633753, AA019312, AL037554, AW269117, AA224083, AA780503, AI932599, AI470646, AI133164, AA497023, AA618452, AA724333, AI005388, AW023990, AW270657, AA493136, AL041690, AI305766, C15893, AL037683, AW168618, AW268973, AL048925, AA708664, AL041453, AI344812, AL043009, AI334464, AW193461, AA468022, AI926855, AA564570, AW270343, AI340641, AA719524, AA908687, AA501762, AA584167, AL041444, AI223604, AA629872, AI873852, AW080777, AL045053, AA551975, AI039584, H25921, AA356089, AI932493, AA541423, AW193265, AA478297, AI311927, AA613345, AA531079, AI691091, AL118991, AI350211, AA569240, AI754658, AW131249, AI860013, AA455483, AI633390, AA018283, AA487621, T06754, AI927116, AA488746, AI250083, AA065093, AI912383, AL037040, AL043289, AA831132, AI479966, AI284640, AA299189, AA380354, AA613397, AI584186, AI933534, AW149313, AL138455, AI954260, AA774059, AI207496, AA297769, AI525319, AI217936, AI275355, AA639326, AL038799, AA127426, AA663170, AA326372, AL042853, AW104030, AL040061, T92271, R35746, AW020340, AI003255, AA715267, AA101689, AI268334, AI268336, F07743, AA992891, AA402129, AI754253, AA715255, AA581903, T41247, AJ006997, AC007514, AC006017, AP000170, AC007114, AC004150, AC004491, AC005745, AC006568, AC007206, AC006017, AP000170, AC007114, AC004150, AL022326, AP000550, AL031577, AC007708, AC007666, AC008018, AL049576, AC009288, AC005923, AF111168, AC007666, AC006285, Z83826, AC008039, AF109907, AC006022, AL118507, AC006251, AC005696, AL031665, AC005871, AL008718, AL133445, AC005829, AC000029, AC004913, AC006004, AL049569, AC007421, Z82244, AC012398, Z83840, AC006059, Z93943, AC010072, AC006014, AC004519, AL035461, AC004024, AC007214, AC007879, AC002470, AC002470, AC004227, AC007637, AC008268, AL035419, AC003986, AL135783, |

| | | | | | Accessions |
|---|---|---|---|---|---|
| HNGHN93 | 4424 | 506259 | 1 - 342 | 15 - 356 | AC005482, AC009286, AL096791, AF111169, AP000088, AL008720, AL035587, AC007191, AL121892, AL078604, U15177, AC006199, AC005209, AC005610, AP000124, AC006332, AL109967, AP000552, AL008626, AP001052, AC002480, AC004991, AC005005, AF030261, AC008038, AC002543, AC012330, AJ010770, AC005821, AL132708, AF053356, AC004990, AC002287, Z82217, AL021155, AC007564, AP000512, AF114156, AC004021, AL049825, AP000330, AC009330, AC006292, AC005257, L48038, AC000026, AC002059, AC008123, AC005081, AL022329, AC007731, AC002045, AC005808, AC005037, AC005500, AC004615, AC006449, AL049759, AL136297, AL080317, AC004099, AL031257, AC004016, AC005003, AL133163, AF001298, AC004408, Z95116, Z81450, AL023882, AC004652, AL035072, AL033523, Z97352, AL031293, AB023049, AL009172, AC008014, AC006370, AL035405, AL022721, Z97876, AP001053, AL031255, AL031281, AC004884, AP001038, AC006112, AC005042, AF088219, AC005066, AC005664, AC004055, AC005751, AC005725, AC004041, AC005603, AF023460, Z93023, AC005244, AC003670, AC008115, AL121652, AC009542, AL035427, AC002347, AC002457, AC005862, AF015416, AC004862, AC000052, AC004019, AC004383, AL122003, Z81364, AP001037, AC004466, AL133485, AC007450, AC006021, D83989, AL079352, AC004463, AC002301, AC005391, AC005228, AC004033, AC006088, AC004087, L78833, AC005406, AC002301, AC002546, Z84474, AC008062, AC000378, AC003086, U67228, AL096771, AP000459, Z95152, AL049643, AF126531, AB020870, Z69719, AL031300, AC004875, AP000448, AC007159, AC004638, AC004167, AC005009, AL023803, AC005839, AC007671, AF184110, AP000280, AL049829, AC004890, U85196, AR036572, U91328, AC008013, Z82215, AF002994, AC006581, AC005212, AC009464, Z92542, AC016025, Z82198, AL133371, AC007656, AC007437, AL021877, Z84482, AC006323, AF165142, AC005920, AL117258, AC002119, AC006045, and Z99127. |
| HNGHN94 | 4425 | 970856 | 1 - 423 | 15 - 437 | |
| HNGHN95 | 4426 | 576127 | 1 - 426 | 15 - 440 | Z96194. |
| HNGHO02 | 4427 | 920373 | 1 - 329 | 15 - 343 | |
| HNGHO10 | 4428 | 964804 | 1 - 305 | 15 - 319 | |
| HNGHO15 | 4429 | 576168 | 1 - 213 | 15 - 227 | |
| HNGHO26 | 4430 | 420281 | 1 - 236 | 15 - 250 | AC010168. |
| HNGHO28 | 4431 | 576173 | 1 - 361 | 15 - 375 | AC007563. |
| HNGHO32 | 4432 | 575735 | 1 - 368 | 15 - 382 | |
| HNGHO36 | 4433 | 576142 | 1 - 367 | 15 - 381 | |
| HNGHO62 | 4434 | 840278 | 1 - 311 | 15 - 325 | |
| HNGHO66 | 4435 | 576174 | 1 - 369 | 15 - 383 | |
| HNGHP28 | 4436 | 576178 | 1 - 294 | 15 - 308 | |

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| HNGHP66 | 4437 | 576136 | 1 - 126 | 15 - 140 | |
| HNGHP74 | 4438 | 577357 | 1 - 192 | 15 - 206 | |
| HNGHP91 | 4439 | 576053 | 1 - 225 | 15 - 239 | |
| HNGHP95 | 4440 | 577335 | 1 - 412 | 15 - 426 | AC006352, AC007028, AB019440, AB019438, and AB019437. |
| HNGHQ27 | 4441 | 683507 | 1 - 331 | 15 - 345 | |
| HNGHQ43 | 4442 | 576262 | 1 - 429 | 15 - 443 | |
| HNGHQ55 | 4443 | 576144 | 1 - 237 | 15 - 251 | AW407632, AI270120, AA937809, AA968509, AA305492, AA502207, AI709174, AA947369, AA730916, AI521525, AA557945, AA135761, AI537368, AA809104, AI821945, AW020150, AA492105, AAG61948, AA747480, AI358501, AA525407, AA297496, AA077619, AL041681, AL041682, AA135988, H15241, AA229159, AI289505, AW068580, Z23147, AA665330, AA015948, R98218, N22153, AA441788, AA847427, F23274, AA748140, F34826, AI679045, AA858380, AA669251, R70883, T49013, F29989, AA847508, AA229988, AI246884, T05684, AI049722, AL039930, AA714073, AL045476, AW080134, AA357987, AA229034, AA351808, AI284640, AI298079, AA598892, H02631, N35492, AA507990, AI572560, AA558003, AA187277, AA226142, AA778962, AI285453, AI358343, AI624379, AI499954, AW105737, AA181070, AI636422, AA742815, AA991792, AI249688, AI524022, AW410715, AA377730, T49933, AW190484, AA664604, AI471827, AW073498, AI929410, AI753672, AI865196, AI590459, AI750950, AW151541, AI924207, AA135811, AA670456, AA569220, AW193609, AI917891, AL035460, M87898, AC009501, AL117258, AC002059, AC004531, AC005253, AF217403, AC007055, AC006275, AC004685, S42653, AC000394, AC006312, AC005261, S77605, AL049829, AL049835, AC005568, AC005516, AC004841, AC005550, AL121603, AC002400, AL136168, AC002425, AF091512, Z85987, Z97630, AL049569, AC005081, AF024534, M87914, AL031295, AC004900, AL035697, AC004643, M87919, AC005578, S70707, AC005102, AL121658, AC007358, AL035659, Z97832, AJ003147, AL021154, U75285, AC004702, U47924, AC006449, AC006552, AC009731, S75337, AL049830, AP000225, AC002054, AC005104, AP000704, AP000008, AC005086, AL022318, AL022336, AC005046, AL031673, Z82179, Z49236, AP000467, AC007199, Z30993, AC005318, AC000087, AF196969, U95742, AC006071, AP000467, AC007199, Z30993, AC005318, AC000087, AF196969, AC005585, AC005581, AC005014, AC004834, U96629, AC007216, AC006017, AC004560, AC006130, AC005581, AC005014, AC020663, AC005921, AL034351, AC009247, AF134726, AC009516, AC005295, Z83838, AL034402, AC004805, AC005280, AL031729, AC005726, AC005781, AC005082, AC006241, AF139813, AL031680, AF196970, AD000092, AC004079, AC006059, AF165926, AL031767, AC006538, AP001068, AC005256, AC000025, AC004644, AC006111, AC005088, AC005919, AC005919, AC005920, AP000116, AC005911, AL049869, AC004131, AC010205, AP000555, AC002994, AC006157, AL096761, AL008718, AL031591, M87918, AC006480, AL109798, AL021546, AC007686, Z84487, AL049653, AL109963, |

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| HNGHQ72 | 4444 | 576105 | 1-431 | 15-445 | AL024498, Z82203, AC005366, AL022324, AL035658, AC006597, AC005943, AB022049, AC004653, AL109853, AC004494, AL021707, AC005049, AC031905, AC003048, AL031257, AC000003, AC005940, Z93244, AC007367, AC002395, AC008044, AC005551, AL031848, AC003029, AL031286, AC006930, AF107045, AC002316, AP000691, AL023553, AP000151, AP000010, AL133382, S70697, AC005913, AC006075, AC016025, AC007387, U73169, AC004821, AC006026, AC005756, AF001549, AL034554, AC006942, AC004988, AJ011930, AB023050, AC016026, AL031281, AC004263, Z98747, AF111168, AJ239318, AL049643, Z98742, AC002126, AF067844, AC005514, AC005932, AC004611, AC002091, AL133163, AC005225, U14684, AC002097, AL121653, AC008072, AC000088, AL031602, AL034423, U02058, AL117328, AC006372, AF064857, AC006948, AC000082, AC004686, U89335, AL035400, AP000694, AC004000, and AL024509. |
| HNGHQ76 | 4445 | 770126 | 1-234 | 15-248 | AC000091, AF012130, and AF012131. |
| HNGHQ96 | 4446 | 723008 | 1-428 | 15-442 | |
| HNGHR04 | 4447 | 576196 | 1-435 | 15-449 | |
| HNGHR79 | 4448 | 576199 | 1-423 | 15-437 | |
| HNGIR83 | 4449 | 576210 | 1-426 | 15-440 | AL139054. |
| HNGHT06 | 4450 | 935706 | 1-361 | 15-375 | AA204714, AA487224, AI267391, AI267160, AW438516, T59853, AA128726, AI267405, AA774106, T51817, T52748, AI267270, AC004902, X82942, M21305, M77220, AF002202, and M77221. |
| HNGHT92 | 4451 | 576149 | 1-235 | 15-249 | |
| HNGHY07 | 4452 | 953531 | 1-380 | 15-394 | |
| HNGHY31 | 4453 | 577363 | 1-433 | 15-447 | |
| HNGHY54 | 4454 | 730769 | 1-312 | 15-326 | |
| HNGHY78 | 4455 | 576139 | 1-318 | 15-332 | |
| HNGHZ17 | 4456 | 860532 | 1-430 | 15-444 | |
| HNGHZ48 | 4457 | 576181 | 1-137 | 15-151 | |
| HNGHZ51 | 4458 | 716649 | 1-300 | 15-314 | |
| HNGIA19 | 4459 | 576269 | 1-433 | 15-447 | |
| HNGIA40 | 4460 | 576155 | 1-432 | 15-446 | |
| HNGIA66 | 4461 | 678887 | 1-430 | 15-444 | |
| HNGIC34 | 4462 | 934280 | 1-462 | 15-476 | |
| HNGIC67 | 4463 | 576177 | 1-297 | 15-311 | |
| HNGID03 | 4464 | 921946 | 1-249 | 15-263 | |
| HNGID11 | 4465 | 967226 | 1-338 | 15-352 | |
| HNGID15 | 4466 | 660299 | 1-432 | 15-446 | AL133216. |

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|---|---|---|---|---|---|
| HNGID16 | 4467 | 576114 | 1-329 | 15-343 | AC005072, and AF006752. |
| HNGID33 | 4468 | 868069 | 1-110 | 15-124 | Z68324. |
| HNGID67 | 4469 | 751668 | 1-334 | 15-348 | |
| HNGID78 | 4470 | 576117 | 1-386 | 15-400 | |
| HNGID80 | 4471 | 576120 | 1-352 | 15-366 | |
| HNGID89 | 4472 | 577358 | 1-196 | 15-210 | |
| HNGID91 | 4473 | 577189 | 1-430 | 15-444 | |
| HNGIH02 | 4474 | 920362 | 1-339 | 15-353 | AC003976. |
| HNGIH56 | 4475 | 576122 | 1-233 | 15-247 | |
| HNGIH94 | 4476 | 576123 | 1-260 | 15-274 | |
| HNGII16 | 4477 | 576154 | 1-77 | 15-91 | |
| HNGII47 | 4478 | 576156 | 1-175 | 15-189 | |
| HNGII50 | 4479 | 915340 | 1-319 | 15-333 | |
| HNGII74 | 4480 | 576158 | 1-367 | 15-381 | |
| HNGII76 | 4481 | 576153 | 1-99 | 15-113 | |
| HNGII85 | 4482 | 576102 | 1-274 | 15-288 | |
| HNGIJ01 | 4483 | 916748 | 1-345 | 15-359 | |
| HNGIJ05 | 4484 | 925597 | 1-325 | 15-339 | AL079339. |
| HNGIJ11 | 4485 | 964809 | 1-334 | 15-348 | |
| HNGIJ59 | 4486 | 860526 | 1-311 | 15-325 | |
| HNGIJ66 | 4487 | 576224 | 1-152 | 15-166 | |
| HNGIJ67 | 4488 | 506355 | 1-373 | 15-387 | |
| HNGIJ96 | 4489 | 779901 | 1-436 | 15-450 | AI688289, AC003968, AC003960, AJ009632, Z84477, AC006374, AC008064, AC004051, AL133224, AC005156, AC000119, AC004137, AP000701, and AC006254. |
| HNGIK41 | 4490 | 712362 | 1-238 | 15-252 | |
| HNGIK42 | 4491 | 713817 | 1-316 | 15-330 | |
| HNGIK77 | 4492 | 772230 | 1-423 | 15-437 | |
| HNGIL27 | 4493 | 839952 | 1-500 | 15-514 | |
| HNGIL43 | 4494 | 715328 | 1-437 | 15-451 | |
| HNGIM04 | 4495 | 615308 | 1-438 | 15-452 | |
| HNGIM46 | 4496 | 653221 | 1-428 | 15-442 | |
| HNGIM76 | 4497 | 770078 | 1-263 | 15-277 | AC005251. |
| HNGIM90 | 4498 | 788715 | 1-341 | 15-355 | AW089101, AA493894, AW089604, W45350, AA478355, AI630176, AI783581, AI345418, AW410354, AL038072, AA303007, AA633753, AW069084, AA721047, R99518, AL049636, AC011311, AP000151, AL109984, AL031668, D87675, AL022323, AC006241, U85195, AC019014, AC005531, AC007390, AE000658, AC004217, AJ003147, AC005682, AL021155, |

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|---|---|---|---|---|
| HNGIM92 | 4499 | 1 - 245 | 15 - 259 | AL035086, AC006121, AC003071, AF053356, AC005231, AL008718, AC007371, AC006111, AC004547, U73648, AC015853, AC007637, AF037338, AC005003, AC007066, AC002303, AL023R03, AC002037, AC005971, AF129756, AC005694, AC004883, AF200465, AC005067, AC002984, AL008732, AL035450, AC004780, AC006511, AC007056, Z93024, AL035454, AC006992, AC004982, AP000555, AL049569, AL133445, AL022336, AC004019, AC006043, Z97054, AF017104, AC007934, AL021394, AC005529, AP000152, AC009247, AC005519, AC002288, AP000010, AC003080, AC005372, AC008115, and AC005409. |
| HNGIN11 | 4500 | 1 - 553 | 15 - 567 | AC007226, AC007216, and U95742. |
| HNGIN18 | 4501 | 1 - 436 | 15 - 450 | |
| HNGIN28 | 4502 | 1 - 440 | 15 - 454 | |
| HNGIO15 | 4503 | 1 - 392 | 15 - 406 | |
| HNGIO77 | 4504 | 1 - 365 | 15 - 379 | AL050318. |
| HNGIP30 | 4505 | 1 - 324 | 15 - 338 | AI633157. |
| HNGIP39 | 4506 | 1 - 340 | 15 - 354 | AW450501, AI444815, AI444830, and C20642. |
| HNGIP42 | 4507 | 1 - 377 | 15 - 391 | |
| HNGIP72 | 4508 | 1 - 321 | 15 - 335 | |
| HNGIQ28 | 4509 | 1 - 422 | 15 - 436 | |
| HNGIQ43 | 4510 | 1 - 405 | 15 - 419 | N52389, and AC006487. |
| HNGIQ48 | 4511 | 1 - 406 | 15 - 420 | |
| HNGIQ66 | 4512 | 1 - 345 | 15 - 359 | AF001550. |
| HNGIR34 | 4513 | 1 - 422 | 15 - 436 | |
| HNGIR92 | 4514 | 1 - 382 | 15 - 396 | AA642060, AW021583, AA364701, AI471543, AA630362, AA320748, AW270382, AA302308, AA828680, AA121651, AA534010, AA535406, AA829106, AI625292, D25870, AW245747, AA508509, AA515549, AA310158, AA947547, AA584752, AI672135, AA338522, AA346692, AA384502, AA614069, AA584201, AI674873, AA482801, R65755, AA503600, AI343137, AL109842, AL008635, AP000230, Z83840, AP000144, AC004098, AC006251, AL022326, AC006430, AC009516, Z98200, AC002350, AC007488, AC004254, AP000330, AL021937, Z99716, AL121658, U95740, AL022238, AC010200, AC000052, AL022476, Z14320, AC002310, AL023807, X87344, AC004019, AC005324, AL080243, AC005412, AL117694, AC004526, AC005280, AC007676, AL035079, AC005736, AC006111, AC005251, U85195, Z85986, AL023284, AE000658, AC002985, AC005197, AP000352, AC005251, U85195, Z85986, AL023284, AE000658, AC002985, AC005197, AI.122003, AL031848, Z93017, AC008079, AC002045, AD000092, AC006271, AL109984, AL022318, AC005212, AL078581, AP000356, AL121603, AF217403, AC007684, AC005181, AC016027, AP000553, AC016830, U91326, AB001523, AC006115, AC006449, AC006001, U95742, Z69919, AF055066, AP000556, AC007216, AL109837, AC005888, AC007193, |

| ID | No. | | 1- | 15- | Accession numbers |
|---|---|---|---|---|---|
| HNGIS13 | 4515 | 575753 | 1 - 433 | 15 - 447 | AL021579, AC005015, AL009179, AC005043, AC004542, U47924, Z85995, AC004895, AC008101, AC004259, AC003856, AC000003, AB000882, AC005013, AC006071, AC001231, AC005722, AC005775, U07000, AL050305, AC005520, AP001037, AP000114, AP000046, AC002369, AC006965, AC005231, AL035089, AP000170, AC004600, Z84480, AL023877, AC005229, AC004633, AC005288, L81576, AC002383, AP000013, AL035410, AF111168, AC006368, U73649, AL031255, AL079340, AC004227, AC005776, AF038458, AL021393, AL117258, AL133246, AC006120, AC005695, AP000039, AP000107, Z95889, AP000692, AC006461, U80017, AC000353, AC004797, AP001052, AJ011930, AC004808, AC005971, AC005529, and AC004963. |
| HNGIS30 | 4516 | 575758 | 1 - 387 | 15 - 401 | |
| HNGIT70 | 4517 | 953890 | 1 - 337 | 15 - 351 | AP000289, AP000042, and AP000110. |
| HNGIU55 | 4518 | 576804 | 1 - 356 | 15 - 370 | T89425, AA767864, AW182499, AC005048, AL096791, AC002288, AL049776, AC005335, AC003041, AL121658, AL133163, Z97053, AL024498, AC005822, AL096712, AJ004799, AL096677, AC007773, AP000152, and AC005321. |
| HNGIU78 | 4519 | 666261 | 1 - 1165 | 15 - 1179 | AI990528, N32583, AI912629, AI797685, AW271508, N48797, N63434, AA028097, AA600208, AI625030, AI400958, AI634765, AI476166, AA028193, N53089, AA027192, AA983548, AI275119, N95741, AI985384, AI089985, AI436753, H46571, AA948552, AI961496, N41920, AW268829, H82459, H30219, AA761602, AA595696, AA702431, AA813396, H57726, AA204768, AI357228, AA973078, H82509, AI650605, AI954387, H89069, AA279240, AI572804, AA027191, AI000790, AI221539, N45589, T87206, R22923, AA456515, AI805811, AI521168, AI253183, AA815372, H30888, AL119319, AL039912, AW392670, AL119484, AL119324, AL134527, AL119335, U46347, AL119391, AL134525, U46351, AL119457, AL119522, AW363220, AW384394, AL119363, AL119497, AL119555, U46341, AL119444, AW372827, Z99396, AL042542, AL043003, U46346, AI064830, AB026436, AR043113, AR066494, AR060234, and A81671. |
| HNGIV01 | 4520 | 913687 | 1 - 483 | 15 - 497 | |
| HNGIV24 | 4521 | 766775 | 1 - 198 | 15 - 212 | |
| HNGIV81 | 4522 | 777970 | 1 - 720 | 15 - 734 | AL049743. |
| HNGIW70 | 4523 | 883086 | 1 - 572 | 15 - 586 | H90844, AF111168, Z85986, AP000088, AC007565, AC010197, AP000556, AC004167, AC002470, AC009516, AC004526, AC004030, AP000228, AF111169, AC006160, AP000140, AC004560, AC006120, AC006509, U91326, AP000552, AL031295, AC007546, Z84469, AL079342, and AC005940. |
| HNGIW73 | 4524 | 764456 | 1 - 345 | 15 - 359 | |
| HNGIY22 | 4525 | 674660 | 1 - 261 | 15 - 275 | |
| HNGIY36 | 4526 | 707323 | 1 - 182 | 15 - 196 | |

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|---|---|---|---|---|---|
| HNGIY56 | 4527 | 868065 | 1 - 339 | 15 - 353 | AA448018, and AB016816. |
| HNGIY60 | 4528 | 740404 | 1 - 148 | 15 - 162 | AA306200, H09834, and Z99714. |
| HNGIY79 | 4529 | 775229 | 1 - 518 | 15 - 532 | AI268789, AL031297, and AL021155. |
| HNGIY92 | 4530 | 792737 | 1 - 349 | 15 - 363 | |
| HNGIZ36 | 4531 | 670962 | 1 - 388 | 15 - 402 | |
| HNGIZ56 | 4532 | 733439 | 1 - 303 | 15 - 317 | AC006465. |
| HNGIZ69 | 4533 | 757599 | 1 - 423 | 15 - 437 | |
| HNGIZ82 | 4534 | 668704 | 1 - 409 | 15 - 423 | AI674585, and AW137161. |
| HNGJA15 | 4535 | 787570 | 1 - 959 | 15 - 973 | AL110505. |
| HNGJA18 | 4536 | 666512 | 1 - 292 | 15 - 306 | |
| HNGJB34 | 4537 | 936011 | 1 - 424 | 15 - 438 | T15352, AA586366, AA585098, AA585325, T18597, AA170832, R29657, R4895, AA585101, D53161, Z32822, C15406, Z32887, D57491, D59751, R28735, R29445, C15069, D61185, AI557718, AA585155, AI557740, AI525316, AA585378, AI557262, AI526184, R28892, AI557864, AI541356, R28965, AA585439, Z28355, AI526140, AI541365, AI525500, D60765, D54897, AA585329, D60844, D59436, R29218, C16294, AI526078, AI541517, AI557731, R28967, R28895, AI557727, AI541205, AI541535, AI546971, AI525556, C16315, Z33559, AA283326, AI541383, AA585476, AI546999, AI547250, AI557763, AI546875, D55233, AI540903, AI526016, AI547039, D61254, D53447, AI557734, AI557084, C16292, C15120, C15762, D54850, D52835, D53472, D51433, AI557787, AI541346, C16300, AI541013, AI535639, C16293, AI557807, AI525306, C16305, C15737, AI557809, AI541374, AA585356, D60730, AI557758, AI546945, AI525431, AI526191, AI557155, AI541034, AI547196, D59458, C16296, AI526194, AI557408, AI547202, AI541523, AI557533, R29179, Z30131, AI525339, D57186, AI526112, AI557602, AI546831, AI546921, AI541307, AI526109, AI546996, AI540967, AI546891, AI547006, AI526024, AI526117, D78224, AI525856, AI557279, AA585430, AI540974, AI535660, AI541321, AI541515, AA585453, AI525320, AI557808, Z36724, C14208, AI526176, AI541402, R29262, AI557852, R29172, AI541492, AI526113, AI526195, R29177, C16290, AI541527, AI546829, AI526158, AI526146, AI556967, T19407, AI546901, AI541516, AI557317, AI536138, AI525168, AI541422, AI557039, AI526073, AA585389, AI526205, AI547137, AI541510, AI525656, AI557786, T41289, AA514191, AI557264, AI525332, AI557799, AI526180, AI557810, AI526187, AI546954, AI525286, AI525114, AI524904, AI557041, AA585117, AI547189, AI541423, AI541027, AI524891, AI525076, T41329, AA585434, C14210, D61060, C14322, AI541506, AI541415, AJ239433, AP000543, AR038855, AR062871, A25909, Y09813, X82786, A85395, A70872, A70869, A85476, X76012, AR037157, X81969, U87250, Z32836, AJ244005, Y16359, AR054723, AF082186, AR038762, AR031358, D50010, X55486, AR031365, D13509, AJ244004, A20702, AR062872, AR062873, A20700, D78345, A43189, A43188, AR017907, AJ244003, AJ244006, AR017826, AJ243486, AC005913, AR003381, A98420, A98423, A98432, A98436, A98417, A98427, AR008429, Z30183, A62298, AF213384, AR050070, |

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|---|---|---|---|---|---|
| HNGJB52 | 4538 | 724406 | 1 - 432 | 15 - 446 | A82595, A82593, AF006072, A98767, A93963, A93964, I63120, AF135243, AB005666, X82834, AJ131952, and L36913. |
| HNGJB68 | 4539 | 753060 | 1 - 371 | 15 - 385 | AC005950, and AC001228.<br><br>AA618452, AI284640, AW270382, AL121235, AI537506, AI539563, AI357551, AI364809, AI431303, AI754955, AA720702, AW021583, AA658362, AA747777, AI457397, AA513303, AA548511, AA503475, AI679045, AL040921, AA593247, AA713891, AI434695, AI358431, AL046457, AI038123, AL038123, AL044858, AA584145, AL038474, AI821271, AA101689, N27584, AI355224, AA523838, AA535406, F17891, AI745325, AA724333, AA804962, AI674873, AA534204, AW265699, AA683258, AA534010, AI270248, AI246119, AI053790, AI805607, AI684097, AA856954, AA053635, AL022328, AC004139, AP000459, AC007308, AL031283, AC006153, Z93241, Z98036, D87675, AC004019, AL031848, AC004673, AP000745, AC004808, AC005242, AC006480, AC007057, AL049872, AC000052, AP000556, AL031670, AP000349, AL049760, AF134726, AC007242, AC004386, AC002470, AC007514, AC004499, AL031668, AP000088, AL008718, AC005815, AC006948, AP000122, AP000054, AC006991, AP000553, AL031346, AL009179, AC005231, AC010205, AC005902, Z83845, AC007040, AL022329, AC009405, AL049758, AL049539, AC005787, AC007262, AL034451, AL050318, AC005940, AL022721, AL049766, AC005004, AL049829, AC003684, AP001137, AL031295, AL022238, AL049699, AL049692, AP001053, AC011456, AC005089, Z83840, AC005923, AL133245, AC007748, AC005324, AC002316, AC005768, AL078472, AC005923, AC002301, AL024498, AL118516, AC005409, AP000031, AC004492, AC005005, U62317, AL118497, U52112, AC005250, AE000658, AL049643, AC006006, AC000353, AC006042, Z75746, AC002365, AC006132, AC005512, AF107885, U85195, AL096701, AC005844, AP000403, AC007226, AC002310, AL121877, AL080317, AL035249, AL022323, AB009667, Z97056, U07000, AF042090, AC005071, AL035249, AP001054, AC005332, AC005043, Z86090, AC005900, AB001523, AP000326, AC004638, AC005154, AP000023, AC004531, AC009516, AC004600, AC005924, AC006322, AC004963, AC003986, AL118509, AC009227, AC000067, AC004876, AL008582, AP000169, AC005509, AL050341, AF038458, AC004230, AC006071, AL049780, AC007666, Z82215, AC002404, M87919, AC005527, AC012627, AC007298, AC006515, AP000966, AC009044, AC005225, AL078623, D84394, AL035587, AL023284, AC005180, AC004675, AP000356, AC002418, AL049873, AL031257, AC005781, AL034553, U95743, L77570, AL132994, and AC007878. |
| HNGJC60 | 4540 | 723380 | 1 - 404 | 15 - 418 | |
| HNGJC66 | 4541 | 786924 | 1 - 339 | 15 - 353 | |
| HNGJC76 | 4542 | 739500 | 1 - 162 | 15 - 176 | AC005915. |
| HNGJD15 | 4543 | 660312 | 1 - 201 | 15 - 215 | |
| HNGJD61 | 4544 | 774154 | 1 - 737 | 15 - 751 | |
| HNGJD71 | 4545 | 760397 | 1 - 428 | 15 - 442 | AB022522, AB022521, AJ012652, and AB012162. |

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|---|---|---|---|---|---|
| HNGJID76 | 4546 | 670948 | 1-339 | 15-353 | |
| HNGJE16 | 4547 | 661976 | 1-366 | 15-380 | |
| HNGJE33 | 4548 | 795219 | 1-409 | 15-423 | |
| HNGJE40 | 4549 | 960003 | 1-380 | 15-394 | |
| HNGJE56 | 4550 | 669732 | 1-415 | 15-429 | |
| HNGJF26 | 4551 | 666504 | 1-399 | 15-413 | AL096853. |
| HNGJF65 | 4552 | 698487 | 1-575 | 15-589 | AW293616, and AA661680. |
| HNGJF73 | 4553 | 683440 | 1-395 | 15-409 | |
| HNGJF79 | 4554 | 775221 | 1-142 | 15-156 | |
| HNGJG15 | 4555 | 660308 | 1-421 | 15-435 | AL021528. |
| HNGJG37 | 4556 | 708703 | 1-376 | 15-390 | |
| HNGJG72 | 4557 | 970797 | 1-387 | 15-401 | |
| HNGJG89 | 4558 | 778294 | 1-240 | 15-254 | |
| HNGJH09 | 4559 | 415566 | 1-292 | 15-306 | |
| HNGJH11 | 4560 | 860350 | 1-435 | 15-449 | |
| HNGJH35 | 4561 | 952237 | 1-337 | 15-351 | AL045943, AL134524, AL042377, L26292, AF190465, AC007425, AC002540, AL035420, U89387, AC006241, AC005911, AC005519, AL049557, AL031681, and AC005940. |
| HNGJH50 | 4562 | 666843 | 1-435 | 15-449 | |
| HNGJH96 | 4563 | 953648 | 1-246 | 15-260 | |
| HNGJI29 | 4564 | 690667 | 1-373 | 15-387 | AC005058. |
| HNGJI35 | 4565 | 707328 | 1-375 | 15-389 | |
| HNGJI42 | 4566 | 465160 | 1-405 | 15-419 | |
| HNGJI54 | 4567 | 465159 | 1-369 | 15-383 | |
| HNGJI71 | 4568 | 760393 | 1-412 | 15-426 | AI124706, AA307598, T74524, AI609972, AI755214, AI754567, AA658918, AI754105, AW328331, AA527209, AA654038, AA535216, AA643770, AI380617, AW304699, AI612142, AA714110, AI251576, AW274191, AI306232, AA704393, AI912401, AI583466, AI583252, AI733647, AI187148, AA533545, H07953, AA225890, AA747757, AA084609, AA297666, AA515138, AA829036, AW275432, H53284, AI049630, W60522, AW275412, AL118925, R92629, AI446336, AW300749, AA720774, AA904211, AI733662, AI244157, AA877992, AW083678, AA513551, AP000496, AF085946, AL050341, AL031985, AC006071, AC003685, Z93017, AC005184, AL132987, AC006277, AC006312, AC005412, U67813, Z97054, AC005484, AC005800, AC002544, Z98750, AC006237, AC004167, L13176, AC006254, AP001053, AC002115, I34294, AL021707, Z93930, U91326, Z98884, AL080243, AL035587, AC003957, AC004972, AL021546, AL023553, AC007276, AL049872, AC004805, AL031281, AC005049, AF038458, U80017, AL133243, Z99943, AC006441, AL121658, AC004638, AL022336, AF111169, Z99495, AC004084, AL139054, Z94056, AC004534, AL008583, AP000501, Z93016, |

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|---|---|---|---|---|---|
| HNGJI77 | 4569 | 772215 | 1-344 | 15-358 | AC002549, AC005519, AC007014, AL135744, AC000041, AI049830, AF134726, AL031447, AC006211, AL109984, AC004382, AC002312, AI022237, AC005619, AC005903, X7649R, AC004983, AC004966, AL031666, AC002425, U95742, AF196969, AC005736, AP000066, AL031295, AC006285, AC005067, AC005796, U82828, AC005355, Z93023, AC005562, AP000466, AL021397, AL031575, AC004797, AC004030, AF064861, AC007279, AC009516, AC007216, AL023494, AC004030, AC005041, AC005197, D86995, AL031005, AC004913, Y14768, AL096701, AP000694, AC001231, AL035659, AL096703, AC005933, AC004230, AC006946, AL033384, AC005620, M94579, AC005330, AF205588, AC004984, AC004929, AL031670, AC005952, M84371, AC006251, AL021026, AF109907, Z86090, AL022316, AL035072, AC005932, X15723, AJ236701, AC006965, AC004849, Z85987, AP000509, D84394, AC005082, AP000692, AC005815, AC005971, AC016830, AC005081, Z94801, AP000505, AC005215, AC005071, AC022517, AC005625, AL034548, AC000105, AC005520, AC009247, Z95114, AC004477, Z97876, AC002563, AC000353, AC005536, AC005666, AL008582, U47924, AC006480, AC006544, AF045555, AP000558, AC006316, AF017104, AC004851, M30688, AC005231, AC005899, AC007226, AL121653, AC007688. AC005291, AC005156, AL109755, AC005048, AL022320, AC005907, AL080242, AC002395. AC007292, AC005031, AL133289, AC006450, AP000104, AC005327, AC000039, Y11484, AC002488, AC000379, AC007792, AL022165, AL031591, AC005913, AF029308, AC008044, AL023807, AC003010, AL049766, AC005670, AI049779, AL035249, U95740, AC007766, AL022238, AL133246, AC005694, AC004985, AF051976, AC002306, AC005874, AF134471, AL121603, Z96074, AC002091, AL109623, AC007746, AC005004, AC006512, AC002059, AL033527, AC005829, AL021940, AC007192, AL034420, AC004491, AC002326, AC005189, AC005102, AC009330, AC005785, and AC007073. |
| HNGJI83 | 4570 | 781213 | 1-400 | 15-414 | W26162, and AL022721. |
| HNGJJ22 | 4571 | 597096 | 1-447 | 15-461 | T64224. |
| HNGJJ51 | 4572 | 725702 | 1-110 | 15-124 | |
| HNGJK04 | 4573 | 615288 | 1-393 | 15-407 | AC002365. |
| HNGJK06 | 4574 | 935548 | 1-267 | 15-281 | |
| HNGJK12 | 4575 | 970686 | 1-213 | 15-227 | AC004856. |
| HNGJK23 | 4576 | 707327 | 1-113 | 15-127 | |
| HNGJK29 | 4577 | 663954 | 1-162 | 15-176 | |
| HNGJK42 | 4578 | 713810 | 1-387 | 15-401 | AW274296. |
| HNGJK50 | 4579 | 860196 | 1-384 | 15-398 | |
| HNGJK54 | 4580 | 730713 | 1-225 | 15-239 | |
| HNGJK58 | 4581 | 736080 | 1-387 | 15-401 | AA491767, AA714011, AA644090, AA302690, AI243789, AI567676, AW236288, AI270476, |

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| HNGJK71 | 4582 | 739323 | 1 - 366 | 15 - 380 | AA365586, AA021429, AI742168, AA481887, AA130647, AW188869, AA368616, AI791408, AI791720, AI254779, AA570441, AA833896, AA481970, AI829331, T50694, AA833875, H47461, AI002810, AA457408, AI224387, AW238341, AW020612, AA587516, AA557790, AA128511, AI084348, AI679871, AA600368, AW302017, AA595661, R79396, N27751, AA130855, H80989, AA721645, AA525753, AI044966, AA565426, U66083, AC005821, AC002477, AL133448, AC004913, AC005409, AC004975, U89337, AC005399, AI031589, AC004659, L44140, AR036572, U91328, AL031681, AF045448, AC004983, AF023268, AC004878, AL049694, AC007785, AC006480, AL034423, AL080243, AC007151, AC005726, Z94160, AC006101, AF069489, AC005902, I34294, AL109963, AF064860, AC007226, AC003109, AC006111, AL035086, AC005971, AC004967, AC005049, AL008725, AL049780, AC006596, M87889, AC005519, AL133399, AC006511, AC002302, AC000085, AP001053, AP000704, AC005089, AC002126, AP000008, AC005291, Z95331, AL049576, AC005972, AC006071, AB020868, AC004851, AL022316, AC003108, AB004907, AC000024, Z93241, AC005529, AC003982, AL132712, AP000247, AC005028, AC006166, AC000073, AP000512, AC006241, AC000353, AL021878, AC006080, AI022476, AC004554, AP000330, AC005666, AL035671, AC005602, AC004150, AL117352, AC004686, AP000689, AC006077, AL031680, AC004985, AC005330, AC002558, AL034553, AC005566, AL035458, AI021407, AI022069, AC004007, AC003962, AC000159, AC004098, AC006013, AC002511, AL035681, Z83840, AC004647, AC005527, AC000159, AC005952, U95740, AL022721, AB023051, AL022165, AC006040, Z85987, AL135783, AC006026, AC005069, AC004750, AC005907, AC005513, AC002312, AL049636, Z68870, AL035455, AF165142, AC007242, AC005697, AL035420, AL135960, AJ131016, AL035398, AL109623, AF111167, AL021397, AC021397, AC005697, AL035420, AL135960, AJ131016, AF031078, AL022327, AD000091, AP000047, AL035683, AL031311, AC005014, AC004854, AP001054, AF064861, AF030876, AL022320, AC004477, AB003151, Z98949, AC005764, AF165926, AP000143, AC006449, AC005736, AC006538, AL031587, AP000090, AC002350, AC004019, Z98752, AL031295, AL009181, AL034549, AC005067, AL096678, AC008115, AF124523, AP000115, AL008719, AC005670, AC000003, AC005899, AB023049, AL033538, AC007016, AC004525, AL133445, AC002303, AC004559, AC007848, AC006509, AC006530, AL110502, AF053356, AP000240, AL022313, AL117344, AF207550, Z86090, U95742, AP000346, AC005412, AC002984, AF195658, AL021707, AC005057, AC006012, AC005225, AF111169, X55448, AC004644, AC005306, Z98036, AC007011, AL133244, D87675, AC005564, AC005874, AF134471, AC005288, U91321, AJ003147, AF196969, AL031846, AC002314, AC007227, U91323, Z82244, AC004682, AP000248, AC005058, AL031584, AL021528, AL021391, AC006236, AC005229, AC007216, AL031662, AC003030, AL035414, AC016027, AC004883, AL034429, and AL049776. |
| HNGJK77 | 4583 | 732737 | 1 - 530 | 15 - 544 | AL035106.<br>AC006084, AC004820, and AF118125. |

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|---|---|---|---|---|---|
| HNGJK89 | 4584 | 772218 | 1 - 336 | 15 - 350 | Z98747. |
| HNGJL16 | 4585 | 661977 | 1 - 363 | 15 - 377 | AI908137, AA644021, AA552280, AA320136, AP000502, AC006026, and AF134726. |
| HNGJL26 | 4586 | 681819 | 1 - 355 | 15 - 369 | |
| HNGJL27 | 4587 | 725295 | 1 - 563 | 15 - 577 | AA132777, AA809070, AI799864, AW076105, W22288, AI586953, AW192068, AA470553, AI288805, AA470607, and AA470506. |
| IINGJL60 | 4588 | 462981 | 1 - 427 | 15 - 441 | |
| HNGJL73 | 4589 | 783518 | 1 - 333 | 15 - 347 | AC007436. |
| HNGJL76 | 4590 | 793537 | 1 - 596 | 15 - 610 | T59857, AI057232, AA077670, AI056766, AA076992, AI683105, AA633727, AW439721, AA076966, AA077800, AI057266, AA491063, AA854897, AA703747, AA491139, AI125775, AA279111, AI580834, AA490952, AA430496, AA450019, AI038182, AA156779, H29782, AC004916, AC004987, AF109718, AL133216, and AC006328. |
| HNGJM20 | 4591 | 964800 | 1 - 439 | 15 - 453 | AC004672. |
| HNGJM35 | 4592 | 707324 | 1 - 122 | 15 - 136 | AA679195, and AB002375. |
| HNGJM82 | 4593 | 967328 | 1 - 848 | 15 - 862 | AA776881, AI961747, T70076, AI631548, AI198396, AI560937, C04802, AA650160, AI003674, AP000523, AC006453, AL049911, AC002038, AC002307, AP000544, and AP000543. |
| HNGJO10 | 4594 | 964678 | 1 - 395 | 15 - 409 | |
| HNGJO35 | 4595 | 707329 | 1 - 390 | 15 - 404 | |
| HNGJO45 | 4596 | 717069 | 1 - 394 | 15 - 408 | |
| HNGJO73 | 4597 | 668997 | 1 - 348 | 15 - 362 | AW151247, AA360082, AA610353, AA666295, F17549, R17793, AA862218, H11470, AW082006, AA910680, AW387775, AW387778, AA490951, AA588001, AA370455, T47970, AI791659, AA610588, AW387786, AL041749, AI133355, AA177130, AA062982, AA345064, R23873, AL031120, AC004787, AL008582, AP000331, AP000172, AP000057, AP000125, AB023050, Z97832, Z95329, U91326, AC002544, AL096763, AC007406, AL035458, AP000030, AC004228, AC004929, AP000251, AP000133, AP000211, AF020802, AJ229041, AL133448, Z83844, AC005544, AB003151, D89870, AC004152, AP000689, AB020868, AC020663, U52112, AP000512, AP000687, AC006211, AF139813, AL117337, AC004854, Z75887, AC005829, AF003529, AC009247, AL049869, L78810, AC004596, AF111169, AL035659, AC007536, AL050348, AC004797, AC006064, Z94865, AP000151, AC010436, U95742, AP000009, AC007216, AC006121, AC004967, Z98884, AC007225, AC004973, AC005823, AP000302, AP000114, AP000046, AC007276, AC007676, AL031670, AC009069, AL035684, AC004777, AC006468, AL031311, AL080243, Y07848, AC006130, AC000026, AC002059, AL139054, AC005695, AF205588, AC008372, AF196779, U63721, D87675, AC005071, AC005291, AC005874, AF134471, AL034561, AC005899, J05096, U80459, AL049737, AP000694, AC002302, Z86090, AR004690, AC004099, AC003682, AC005011, AL133445, AL109801, AL022323, AL031291, Z94055, AC004099, AC003025, AP000702, AP000703, AC004160, AC005231, AC006312, AP001046, AP000692, |

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| HNGJP03 | 4598 | 1 - 419 | 15 - 433 | AL133163, AF118808, AC005696, AC002347, AP001054, AC007160, AC007024, AL022313, AP000511, AL031255, AC007436, AC005070, AL021393, U91321, M19364, AL133353, AL121652, AC004703, AL020997, AC006600, AP000553, AL031984, AC003982, and AC003102. |
| | | | | R61498, AA953553, AA450228, AI799264, AA719292, AA012998, AI696793, AW438539, AA601202, AC006019, AL031427, AF001548, AC005220, AL031846, AC002310, Z98304, AC005911, L35930, AF207550, AC004774, AC005800, AL096843, Z98044, AL049631, AC002559, AC005104, AC005072, AP000553, AL022330, AC004967, AC002470, AC004895, AL088726, AC004032, Z85987, AC004797, AL031291, L78810, AC002070, Z84480, AC004966, AL035415, AC005067, AC003047, AC000004, AC004702, AL121655, AL049832, AC004859, AC006195, AL050332, Z95152, AC005280, AC016830, L44140, AL133445, AC006312, AC005670, AC005089, AC004526, AC004491, AC012152, AL031662, AL024508, AC000403, AI251973, Z68886, AF020662, AP000696, AC005037, AC002364, AC000396, AC008045, AF135187, AP000152, AP001069, AC004685, AC006948, AC002288, AC004703, Z81365, AC005875, AC005102, AL109865, AL109798, AC006138, AC007064, AL035413, Z83820, AC004755, AC004929, AC004813, AC005612, AL031229, Y18000, AC005529, AC005071, AL031733, AC006160, U95740, AL022721, AL009172, AC006449, AC004382, AC007773, AL096701, AC005252, AC004000, AC005215, AL117391, AC006378, AC005969, AC007263, AC008038, AL031587, AC008372, AC007371, Z84466, AC003695, AC002091, AL034420, AC016027, AP000513, AC003962, and AF064861. |
| HNGJP10 | 4599 | 1 - 662 | 15 - 676 | AC006571. |
| HNGJP80 | 4600 | 1 - 432 | 15 - 446 | |
| HNGJQ14 | 4601 | 1 - 356 | 15 - 370 | |
| HNGJQ23 | 4602 | 1 - 476 | 15 - 490 | |
| HNGJQ25 | 4603 | 1 - 488 | 15 - 502 | |
| HNGJQ35 | 4604 | 1 - 376 | 15 - 390 | |
| HNGJR01 | 4605 | 1 - 542 | 15 - 556 | AA342681, AA581914, AA775049, T48872, R26134, AI754955, AA441788, AA551798, AI360514, AA077776, AI446474, AA649642, R92640, AA662974, AA663306, AI445815, AI049996, AW268190, AW265654, AI978792, AL037910, AA483655, AA649553, AA558298, AW021917, AI597832, AI284108, AA780929, AA128592, AA577732, AI345695, AI114752, AI862716, AI865213, AA809189, AA437402, AI284640, AA482896, AA121919, F29989, AA487542, AA167741, T94094, H58472, AA720732, AW188976, R83838, F23255, AA161181, H64777, AW339622, AI014378, AL036854, AW088058, AA747472, T40612, R32200, AA614010, C14692, F17700, AL120245, AA296859, AI865988, AA527730, AW268277, AI885572, H84359, AI241705, AW337454, AW271904, AW189068, AW440633, AI524540, AA501614, W01999, AA516047, T40617, T52478, AA584489, AI079129, AA679872, AI453233, AA595625, AA747375, AA904275, AA515350, AA557879, T47739, AI160117, AA593471, R82388, T06828, |

AW082744, AI889923, AA311071, AI768952, AA968509, M78007, AL135405, AA846981,
AA448838, AA013436, AA603323, AA579278, H57846, T40077, AI821044, AI859834,
AI538812, AI888405, AA862230, AI370475, AA664604, AI679713, AA603232, AA533408,
AI952900, AA384039, H62778, AA297968, AW407919, AW079809, N45421, AI291317, D78979,
AW021583, AI568683, AA745582, AI625244, AA501784, T71936, AA225585, AA551386,
AA326410, AA298386, AI708005, AL120976, AA342189, AI251002, AA016286, AI053786,
AA857296, N23097, AA483583, AL045709, AI634323, AW069450, AW238016, AI148927,
AI445592, AI251111, AA528500, T53607, D44743, T32050, AA122223, AA744001, AA745524,
AI908093, AA467988, AA714956, AL135643, AA365586, AA468051, R19647, AI471691,
AW167154, T54898, AI053672, N64587, AA076427, AI679413, T47588, AI358089, H29019,
W01998, AI754013, AC009501, Z85996, AP000503, Z95331, Z82182, AC004675, AL031596,
AF088219, AC004231, AF134726, AC004982, AC003664, AL031120, AC007033, Z99572,
Z99570, AC007262, AC005071, AC003101, Y11312, AL049712, AC004099, AL021977,
AC006277, AC006479, AL035413, AF001549, AL021397, AL034429, AF003529, AC004649,
AL031775, AL022327, AC010077, AL049745, Z96568, AC005531, AC003992, AC005632,
AP000347, AC005856, AC008249, AF051976, Z82180, AL109985, AC005037, Z97630,
AP000350, AC005841, AL035089, AC005057, AP000306, AP000047, AC002036, AC005701,
AC005488, AC006057, M37551, AC004042, AC005212, AP000193, Z93241, AP000050,
AC007254, M87914, AL132992, AL121653, U73168, U91319, AC005252, S42655, AP000117,
AC005180, M19482, M27132, AC005381, AC004762, AC004024, AC005753, AP000115,
M87919, AC004000, AC005042, AF084198, AL031845, U07562, AF003626, Z99755, AC002347,
AL022162, AC005042, AC007308, AL122126, AC002468, AL049653, AC004892, AC006014,
AC016831, AC005944, AC007030, AC002070, AL121754, L44140, L81690, AC004263,
AC004590, AF052684, AF039401, AC005101, AC004839, AC005366, AL031075, AL049699,
AL008729, AC005529, AC004805, AC006257, AP000966, AC006372, Z95114, AC005520,
U96629, AC007312, AL049869, AP000556, AL079339, AC004067, AC007161, AC004221,
AF126483, AC004002, AL096803, AC005243, AC005207, AP000049, AL020993, AC002316,
AB007955, AL022317, AC005160, AL049830, AL049569, AC005694, L17418, AP000311,
AC002115, AL031003, AL109802, AC006441, M87918, AP000260, AL034555, AP000099,
AP000216, AP000884, AP000036, AC004692, AL031432, AB019534, AL117352, AF048728,
U73643, AL031393, AC006132, Z99290, AL020990, AC005064, AL035701, AC007237, Z84484,
AL035455, AL031655, AC004816, AC007637, AC008085, AC005297, AC005358, AC005740,
AL135744, AC002365, AC005291, Y18000, D87675, AC006388, AL133304, AC007377,
AL121657, AP000356, AC005162, AL096678, AL096817, AC004150, AC004682, AC007182,
Z99716, AL139054, AP000346, AB009813, AL133233, AC005666, AC006017, AC004554,
AC009464, I34294, AC005565, AC007011, AC005339, AP000076, AC004902, AC004519,
AL109984, AC006443, AL133382, AL022329, L78810, AC004596, AL031985, Z49866,

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| HNGJS24 | 4606 | 677235 | 1 - 319 | 15 - 333 | AC005680, Z98051, AC002477, AC005863, AL049835, AL049780, AL031230, X96421, AC005253, AC006275, AC005387, AB020871, AL022578, Z93016, AP000705, AC007528, AL031848, AC002044, AC002364, U14719, X55448, Z93930, Z82198, AC003668, AC004765, AL022320, AJ003147, AF084941, and AC005274. |
| HNGJS45 | 4607 | 720746 | 1 - 121 | 15 - 135 | AL022147. |
| HNGJS53 | 4608 | 728258 | 1 - 432 | 15 - 446 | |
| HNGJS64 | 4609 | 746606 | 1 - 409 | 15 - 423 | |
| HNGJS91 | 4610 | 920755 | 1 - 415 | 15 - 429 | |
| HNGJT36 | 4611 | 888329 | 1 - 432 | 15 - 446 | AC002483. |
| HNGJT72 | 4612 | 775502 | 1 - 371 | 15 - 385 | |
| HNGJT93 | 4613 | 792338 | 1 - 332 | 15 - 346 | |
| HNGJT95 | 4614 | 953418 | 1 - 345 | 15 - 359 | |
| HNGJU36 | 4615 | 708122 | 1 - 638 | 15 - 652 | AL133216, and AC004883. |
| HNGJU50 | 4616 | 724416 | 1 - 399 | 15 - 413 | |
| HNGJU51 | 4617 | 725703 | 1 - 287 | 15 - 301 | |
| HNGJU78 | 4618 | 860347 | 1 - 420 | 15 - 434 | AI345721, AI640679, AA547976, AI187148, AI281622, H90688, AI369076, AI653776, AW407007, AA230155, AA515742, AW157173, AA523719, AW302078, AA584756, AA984920, T52745, AA362440, AA492264, AL134216, AA515451, AL043745, AA632593, AW328331, AA584527, AW328330, AA354507, AI096738, AA572813, T12424, N69313, H94979, AA630947, AW242279, AI380617, R98835, R94909, AI570019, AA112864, AW162314, AA835346, N87333, AI884404, AW162332, AA564925, AA196287, Z98884, AC009363, AC007056, AC005225, AC004035, AC005362, AL023553, AC006241, AL035411, AC005412, AF044083, Z97054, AC005667, Z97632, AC005695, AC005237, AC007450, AC004485, AC004106, AC004098, AC005841, AP000116, AP000049, AP000311, X96421, U89335, AC003666, AC000052, AF102137, AL035462, U95739, AC004922, AC004685, AC004638, AC003070, Z85986, AP000350, AC005325, AC006581, AL078621, Z92542, AF111168, AL008719, AC004757, AB020868, AC005962, U91318, AC006274, AP000255, AP000213, AP000135, Z86090, AP000031, AL078638, AL133445, AC000393, AC005553, AP000210, AP000132, Z84469, AC004859, AP000248, AC005971, AF143866, AB007914, AP000300, AC004834, AC002036, AP000045, AC005091, AC005215, AC005666, AC009044, AC002429, AC004262, Z83819, AL035458, AL135745, AC007114, AL035460, AC022394, Z94056, AC007540, AC006450, AC006040, AC006088, AL031432, AL022313, Z95331, AC001231, AC005993, AC020663, AL035405, AC006576, AC004941, AL022302, Z95331, AC001231, AC005993, AC020663, AL035405, AC006487, AF064105, AF165926, AL118503, AL117330, AC005328, AL023801, AC005793, U62631, Z68756, AC004643, AC005783, AL022302, AC004802, Z98749, Z98051, AC003002, |

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| HNGJV04 | 4619 | 1 - 210 | 15 - 224 | AC005518, AC002558, AL031293, AF196969, AC004933, AL035413, AC009721, AC004216, AF196779, AC004531, AL109758, AC004019, AC006277, U93305, Z84718, Z98752, AC000115, AL050341, Z85987, AL034420, AP000351, AC002310, AL050350, AC002430, AL049589, AC002472, AC002544, AC007384, AC006549, AC005089, AC005736, AC002470, Z98946, AC007182, AC007955, Z98882, AP000268, AC004013, AL096774, AP000103, AP000033, AC009308, AF030453, AL021939, AJ010770, AC008134, AC005792, AL049699, AC004961, AC004033, AC007227, AC008064, AC005409, AC005071, AC004526, AC004009, AL109627, AC004466, AL035690, AL009031, AC005482, AL035455, AC002326, AL022238, Z86064, AP000113, AC005933, AL035447, AC006237, AP000223, AP000104, AL008715, AP000692, AC004230, AC008116, AL049792, AC004900, AC003950, AC007283, AF118808, AC004241, and Z95115. |
| HNGJV10 | 4620 | 1 - 402 | 15 - 416 | |
| HNGJV91 | 4621 | 1 - 235 | 15 - 249 | |
| HNGKA62 | 4622 | 1 - 508 | 15 - 522 | AA121830, AW402301, H38504, AA227281, and AL050037. |
| HNGKB11 | 4623 | 1 - 516 | 15 - 530 | |
| HNGKB25 | 4624 | 1 - 706 | 15 - 720 | H53110, AW419161, AA551509, AA878495, AA345333, T07346, T51743, AA525407, I181732, AA658235, AA441788, AA773289, AA134367, AA428414, AA583579, AA602557, AI358343, AA335519, AI366902, AA679493, AW062724, AA583568, AA723017, AI952786, AI707788, F35113, AA301813, R44592, AI446464, H68343, AI753037, AL042213, AA508509, AA171941, AI037897, AW327868, AA932099, T48872, AI439360, AI246796, AA525331, AA557686, AA658018, AL045455, AI335963, AA653964, F00949, AI016704, AL109798, AP000692, AL021579, U02050, AL121603, AC005288, L78833, AC002425, AC004741, AL035684, AC005088, U27336, U27334, AP000555, AC008498, Z98941, AF131211, AC004682, AC007536, AL049569, AC004736, AC006463, AF030453, AB016897, AL050312, AC001228, AC004856, AF196971, AP000315, AP000885, AC005102, AL133448, AP000359, AL121653, AL034379, AC005786, AL133245, AC004158, AP000501, AP000115, Z97056, AP000045, AL035086, AC002301, AL135879, AL121790, AP000089, AP000165, AC006449, AL022316, AC005215, AL135960, AJ131016, AP000193, AC004792, AC004985, D16583, AL031846, AL109984, AC004030, AC008040, Z99755, AL022238, AF024533, AC004531, AC008163, AC006432, AP000050, AL031733, Z82185, AC006455, Z85986, AP000117, AP000310, AF050154, AC005972, Z68287, AC020663, AL031905, D87675, AC004383, AC005695, AF190465, AP000118, AF124730, AL009031, AL049832, AC005911, AC002326, AC004129, AL035659, AC007686, AC006561, AL008629, AC005306, AC007199, U75931, AC016026, AL031053, U95742, AC004814, AC002310, AL022574, AL117258, AC004168, AC005375, AL121578, AC002091, AC006160, U66059, AC004678, AL008718, AP000553, AL133163, AC005225, AL079340, AC003695, AC002527, AL022721, AC005837, AC007021, AL035681, AC007157, |

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|---|---|---|---|---|---|
| HNGKB78 | 4625 | 971110 | 1 - 760 | 15 - 774 | AC008989, AC005944, Z99496, AC005041, AC005184, AC007216, AP000959, AC002554, U27337, AC008055, AL022329, AL035604, AC018359, AC006237, AC002565, AC006116, and AC005082. |
| HNGKB93 | 4626 | 791760 | 1 - 291 | 15 - 305 | |
| HNGKD55 | 4627 | 860343 | 1 - 588 | 15 - 602 | |
| HNGKD94 | 4628 | 793414 | 1 - 553 | 15 - 567 | AW270385, AI355246, F35684, AA714011, AI355103, F23338, AA484892, AA282951, AI190648, AA831408, AA503142, AI185394, AA664126, T47138, AI310992, AI300818, AA158549, AI370170, AA857812, AW272815, F34506, AA769141, AA846923, AA558404, AI761677, AW104163, H79586, AW069227, R67701, AI310464, M85711, AI625604, AA568314, AI041375, AW419389, AI362442, AI537995, AI536858, AI130709, AA534208, AI869786, T03412, H29914, AI572680, AW151018, AA654482, AA354695, AA669961, AW237905, AA018231, AW188742, AW272640, AA182731, AA809186, AW023111, AA568204, AA570740, AA582746, AA483606, AA523695, AI634187, AA314891, AA347382, AW008169, R83068, H67064, AA573000, H13120, Z30294, AI431513, AI457313, AA668587, R93919, R79255, AI278972, AW002831, AA491767, AA458534, AI288033, T94394, AI189682, T50676, AI285493, AA878407, AA856841, T05617, AA600202, AW302017, AA553594, AI620992, AW162750, AW192402, AC004883, AC005971, AP000117, AC005280, Z95152, Z98304, Z94056, AC004973, AC006344, Z86090, AC004033, AL109627, AC005551, AC000551, AC000381, Z81357, AL035588, AL096773, AC005722, D88268, AF134726, I34294, AC004893, AC005237, AF207550, AC004878, U73330, U82828, AC006388, AL035659, AC005821, AF051976, AC007546, AL022326, AC003070, AC005089, AC004150, AL049759, AP000696, AC007193, AC011311, AF002223, AL021393, AL096701, AC004963, AC007283, AL021808, AC005378, AL035562, Z92546, Z98750, AC005216, AC004983, AL031255, AE000662, AB015355, Z92241, AC007567, AB016897, AC002400, AP000049, AP000116, AC004522, AC002425, AL049776, AP000500, U62293, AF047825, AP000311, Z85996, M94081, AC002551, AC008126, AC005057, AC006536, AF217403, AP000337, AP000216, AC004881, AC004771, AL031597, AL080245, AC005183, AL049748, AC006125, AL035695, AP000503, AL049834, AF129756, AC006057, AC004417, Z83820, AF001549, AC005317, AP001063, AL078611, AC004253, AL035405, AC006071, AF001550, AC007308, AC006441, AC006116, AC005206, AC005391, AC002470, AB012723, AC004943, AL031228, AL080243, AC004955, U63721, AL117340, AL031670, AP000555, AC005667, AC007030, AP000010, AL031659, Z98200, AL121852, AL117355, AL031005, AL121769, AC004974, AP000359, AP000353, AD000684, AC002128, AC005071, Z98752, AL035420, AL034417, U52112, AF075098, AC006360, AC000393, AF037338, AC006960, AF097738, AP000103, AL022327, AC005779, Z97630, AL050321, AL033517, AL121652, AC005793, AC004929, AC006480, AL117337, Z94801, AP000565, AC006061, AC005686, AC004831, AC006241, AL022311, AL117337, Z94801, AP000565, AC006061, AC005686, |

| HNGKE05 | 4629 | 860320 | 1 - 529 | 15 - 543 | | |
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AC006285, AC004400, AL031257, AI008710, AC006121, AL031283, AL008726, AC005086, Z97054, U73643, AP000345, AC005777, U85195, AL109827, AC004778, AC004686, AI035684, AL117694, AC006019, AC004381, AC004020, AC005808, AC003071, AC007182, AC022517, AL022302, AC004675, AL031681, AF205588, AL008725, U51561, AL022320, AC002563, AC007785, AC005412, Z83847, AC020663, AL133312, AC004663, AL031685, U02068, U73637, AC003035, AL049832, AL096712, Z97053, AC009363, AL034402, AE000658, AL022316, AC007371, AC007216, AC007199, AC003030, AC007878, AC006133, Z98036, AL022158, AL031680, AC007021, AC004000, AC008071, AL022313, Z93244, AC005049, U63630, AL117352, X99832, AF088219, AP000114, AF015416, AC009946, AC005261, AL021807, AJ246003, AC000385, Z49236, AL133382, AC005516, AL049591, and AC002295.

AL138265, AI801482, AI963720, AI370074, AI370094, AI284640, H71429, AW193265, AA610491, AW088718, AL119691, AI249997, AI708009, AW327868, AI431303, AA483223, AL046409, AI312309, AL041690, AA101689, AW021583, AA469451, AI355206, AA569471, AI334443, AW303196, AA652057, AI345654, AL044858, AI307608, N75702, AW249224, AW301350, AW274349, AA720702, AL042420, AI270117, AI305766, AA665330, AL138455, AA192747, AW304584, AA877817, AA490183, AW439558, AW265170, F36273, AL046205, AL079645, AA587256, AI305547, AA649642, AI890928, AW265393, AI368256, AI254615, AI890570, AI131164, AW020340, AI956131, AI888518, AL047427, AW103758, AI110770, AA525416, AI754658, AW088846, AA847499, AA493471, AA551503, AI350211, R24205, AI037683, AL048925, AI613280, AW276827, AI246119, AW408717, AA178953, AA192740, AA747105, AL044940, AI357288, AI568678, AW023672, AA679124, AW276817, AI061334, AA640900, AI962050, AA394271, AI919265, AA526787, AI814735, AW073470, AI133102, AW410400, AA491814, AL042753, AA468131, AA521323, AA581903, AA468022, AA587604, AI434695, AI281881, AI570261, AI064864, AI457397, AW004911, AI345681, AI345675, AI345518, AA834792, AA503475, AI313166, AI561060, AI679782, AA214342, AW438643, AA623002, AI890348, AI368745, AI732764, AW029038, AI149478, AA631507, AI589230, AI289067, AA653618, AW340844, AW265385, AA521399, AI341664, AW276435, AI345157, AA470969, AL038705, AW193432, AA810318, AI224093, AL045053, AA758934, AA486559, AI473943, AI801600, AI610159, AA559290, AI254316, AI344844, AA584581, AI669453, AI688846, AA669840, AI801591, AW261871, AA908687, AI619997, AW238278, AA610271, AI375710, AL039958, AW419262, AL037554, AI471481, AW070892, AI865905, AA601492, AA846935, AA503154, AL120269, AI085719, AW162049, W31373, AI928790, AI929531, AA225230, AW248803, AI053672, AA309841, AI307201, AI076616, AA661948, AW270270, AA601371, AL040130, AW269488, AA164251, AA601355, AA482806, AA828712, R71981, AA583955, AA904275, AW148792, N48230, AI120502, AA806796, AL119984, AI471572, AA205915, AL046457, AL042856, AW072587, AW072923, AI744995, AA665021, AI859742, AL138421, AI679132, AW088616, AA542991, AI580652, AW008317, AI053790, AA680243,

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| HNGKE07 | 4630 | 952221 | 1 - 348 | 15 - 362 | AA747276, AI744188, AL038785, AA229814, AI434706, AA857486, AI821271, AI133297, AL046746, AL031984, U67221, AC005280, Z74739, AF077058, U57007, AF015152, AI031121, U57004, X53550, AC005231, U18396, AC005011, D83989, AF015151, AL035696, U18391, AL022332, U18392, AC008079, X55925, X54181, AL109758, X75335, AF196971, U18393, AF015148, U57005, AL109985, U18394, X54180, AL050312, AC007263, X54178, U57006, AC007227, AF015157, X74558, X55926, AC005771, Z93023, U57008, AC003982, U02532, X54175, U57009, U18395, AC005911, U18387, X55930, AP000556, AL139054, AL109798, I51997, AC006479, AL132641, AC006064, AC004876, X55931, AL021154, AP001172, AL049691, AC006998, AC004813, AC007050, AL031651, AL008725, AI021918, AF015156, AL034379, AP000513, X55924, AC006006, AC004706, AC005632, AC005288, AP000351, AL050332, AL049569, AL096701, AL031286, AC005630, AC006946, X54176, U18400, AC007308, AC006449, AC003006, AC005488, AL021808, AC005261, AC005740, AC004098, AC007450, AL035446, AC005257, AC004257, Z81369, AC018633, AL132987, X54177, X54179, AI022721, AL035458, AC002312, AL049759, AL079295, AC002470, AC005908, M96868, AC004531, AC002432, AF015153, AP000115, AC007225, AF015149, AL021939, Z83840, AC003038, AC004662, U67801, AC005234, Z86090, AC004684, AC005484, U02531, AC004447, U85195, AC007103, AL049830, AC006057, AP000114, AP000046, AC007057, AL049647, AC004805, AC004997, X55923, AC003963, AL035462, AC004890, AC005703, AE000658, AC002472, AP000692, AL020995, X55922, AC004263, AF109907, AL031005, AC007686, AC005696, AC005624, AC005755, AC005585, AC000379, AC005808, AL034420, AP000008, AC006130, AC006312, U67211, AD000684, AC002349, AP000704, U78027, AC002070, AL035587, AC004216, AC002456, AF126483, AC004696, M37551, AC002128, AP000023, AC005193, AL031729, AC003101, AF042090, AL035422, AL033527, AL022322, AL121603, AL049646, AL132992, AC003007, Z95114, AP000348, AC007676, AC006213, U62293, AL049766, U60274, AC004028, AC004816, X53549, AL031276, L81648, Z84814, AL022323, AL035415, AC005379, AC005089, AC005682, AC005360, AC004596, AC006079, AC006001, AC004682, AC005244, AC016830, AC004985, AF196779, AC008124, AL020994, AL049588, U67218, AC007879, AC007298, AC006241, AP000557, Z96074, AC022517, Z78022, AC005512, AL121653, AC002395, AF015155, AL031118, Z69719, Z84718, AF002996, U73479, AB023049, AC008101, AC002368, AC003957, AF141976, AP000567, AC007051, AC006238, U18390, AB020863, AC007666, AC006285, AP000302, AC004815, Z68192, and Z99758. |
| HNGKE52 | 4631 | 812714 | 1 - 575 | 15 - 589 | AA633727, AA703747, AI057232, AL041975, AA077343, AL042361, AA703958, AA317624, AI880143, AA083243, R96964, W03215, H80600, AA491139, AA491063, AI214163, AA076680, AA084739, AI880175, AA078180, AA077670, AA211922, AL040165, H00289, AA077800, AW264118, T59857, AC004916, AC004987, AL133216, AC006328, and AF109718. |
| HNGKE73 | 4632 | 860312 | 1 - 664 | 15 - 678 | AP000522. |

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|---|---|---|---|---|
| HNGKE89 | 4633 | 1 - 522 | 15 - 536 | AI139228. |
| HNGKE91 | 4634 | 1 - 535 | 15 - 549 | AC004263. |
| HNGKE93 | 4635 | 1 - 462 | 15 - 476 | |
| HNGKF01 | 4636 | 1 - 359 | 15 - 373 | D80038, C14389, D51799, D59467, D80227, D80195, D80164, D59275, D59502, AA305578, D80269, D58283, D51423, D59610, C14331, D59859, D80022, D80166, C15076, D59619, D80210, D80391, D80240, D80253, D80043, D59787, D81030, D80193, D80378, D80212, D50979, D80196, D80188, D80219, D59927, D57483, D80241, D80366, D50995, AA305409, D59889, D51022, D80024, D80045, AW177440, C14429, AW178893, AA514188, D51060, D81026, T03269, D80248, AW179328, C14014, C75259, AW378532, D80522, D80251, AW360811, D80133, D80134, AA514186, AW178762, AW177501, AW177511, D58253, D51250, AW369651, AW178775, AW375405, C05695, D80132, AW352158, D80268, AW377671, F13647, D59695, D52291, D80302, AW352117, AW366296, AW176467, AW360844, AW360817, AW375406, AW378534, AW179332, AI910186, AW377672, AW179023, AW178905, C06015, D80168, D80439, D80247, C14227, AW352170, AW352171, AW377676, AW177731, AW178907, AW178906, D81111, AW179019, AW179024, C14298, D59373, D80064, AW177505, AW360841, AW179020, AI905856, C14407, AW178909, AW177456, AW179329, AW178980, D51103, AW177733, AW378528, AW178908, AW178754, AW179018, AW352174, T11417, AW367967, AW179004, D80157, AW179012, AW178914, Z21582, AW378525, AW178911, AW378543, D58246, AW177722, AW177728, D51097, AW179009, AW178774, AW178983, AA285331, T48593, AW178781, AW352163, AW360834, D59503, C14077, AW177723, AW178986, AW352120, D58101, D59627, D80258, D59653, AI557751, D45260, AW177508, D80014, H67854, C03092, AI535850, AW378533, C14975, AW367950, AA809122, AW177497, T03116, D59317, D60214, D80228, AI525917, D45273, H67866, AI525923, D51213, AW177734, AI525920, AI535686, D51221, T03048, D59474, D59551, D60010, C14344, C14973, AW177734, AI525227, AI557774, C14957, C14046, AI525242, AI525235, AI525912, AA514184, AI525227, AI557774, C14957, C14046, AI525242, AI525235, AI525912, AI525215, AI525237, AW378542, AW378539, AI525928, C16955, Z33452, C05763, T02974, T02868, AI525222, AW360855, AI535961, D31458, A84916, AJ132110, A62300, A62298, AR018138, AF058696, AR008278, AB028859, X67155, Y17188, D26022, A25909, A67220, D89785, A78862, D34614, I82448, D88547, Y12724, A82595, X82626, AR060385, A94995, AB002449, AR025207, AR016808, AR008443, I50126, I50132, I50128, I50133, AR066488, AR016514, AR060138, A45456, A26615, AR052274, AB012117, AR066482, AR066490, X68127, Y09669, A43192, A43190, AR038669, I18367, AR066487, I14842, A30438, A85396, A44171, AR054175, U87250, A85477, I19525, A86792, D50010, Y17187, D88507, X93549, A63261, AR008277, AR008281, AR008408, AR062872, A70867, AR016691, AR016690, U46128, D13509, I79511, A64136, A68321, AR060133, AF135125, U79457, AF123263, AR032065, U87247, X93535, and AR008382. |
| HNGKF11 | 4637 | 1 - 473 | 15 - 487 | D80045, T18597, AI536138, AI535660, AI541365, AI535639, R29657, AA585439, AA585098, |

AA585325, R45895, AW366296, AI557084, D59436, AI541205, R28735, R29445, AI557864, D59751, AI525500, AI557262, D58283, AW375405, R28892, AI557731, AI541356, AI526078, AI525556, Z32887, AI557317, D80043, AI541510, D80166, AA585101, R28965, R28967, AI905856, AA170832, D80022, D80391, D59787, R29218, C14389, AI541535, D80196, AA585476, AA585329, R28895, D80253, D57491, C14331, AA585155, AI547189, D80522, Z32822, AA283326, D80188, D59467, AI525302, D59859, D80195, AI557740, D51423, D59619, D80210, D51799, D80164, D59275, D80240, D80366, D80227, AI526187, D59502, D81030, D50979, D80212, AI541346, D80219, AA585378, D57483, AI557807, C15076, C15406, D59927, D53161, D80269, D61185, D59610, D80038, AA305409, D51022, D59889, D50995, D80193, C14429, C15069, D60844, AW177440, D81026, D80241, D51060, AI557155, C14014, AW375406, AI526184, AI540974, D80251, AI557852, AI546971, D60765, T48593, AA514188, AW178893, C14210, D80248, AW360811, D54897, C75259, C16315, T03269, AI526176, AI541383, D61254, AW179328, AI541517, D53472, AA514186, AI541034, D80133, D80247, C16293, AI546875, AI557727, AI557787, AI557763, AI540903, AI557734, AW178762, AI547250, AW378532, D55233, AI525856, AI546999, AI524891, Z33559, AI526016, D80132, D80439, D58253, C16300, AI547039, D53447, AI535686, AW177501, AI547196, AW177511, AI524890, AI525306, D30843, AI541374, AW377671, AW360844, AW360817, C16294, AI536070, AI557533, AI557718, C15120, AW378534, AI541013, D80134, AW179332, AW377672, AW179023, AW178905, D52835, D80268, D51250, AI541515, AW176467, AI546945, AI525431, C16292, AI546829, AA585356, C16305, AW178775, AW369651, C05695, AW352170, D80168, D80302, AI546855, D52291, T11417, C15762, AW352171, AW377676, AW177505, AW179024, AW177731, AW352117, AW178907, AW378528, AW179019, C14227, AI526194, AW352158, D51103, F13647, AW178906, AI547158, AW360841, D78224, AI525339, AW179020, D80157, AI546921, AI557758, D59373, AW178909, AW177456, AI546996, AW178980, AW179329, AI540967, AI526191, A62298, A82595, AR038855, A62300, U87250, A84916, AR018138, I19525, Y17188, AR062871, AR008429, A85395, A85476, AR016808, AJ132110, A94995, A25909, AR008278, AF058696, AB028859, Y17187, AR031365, AR016514, Y09813, U94592, X67155, AJ244007, D26022, A43190, A67220, D89785, A78862, D34614, Y12724, A70872, D88547, AR060385, AB002449, A70869, AR038669, AR037157, A44171, X82626, I82448, A30438, I50126, I50132, I50128, I50133, AR008443, AR031358, AR025207, AR066488, AR060138, A45456, A26615, AR052274, AR050070, AF135243, Z30183, D50010, AF006072, D13509, Y09669, A43192, AR066487, AR054175, X82786, AB005666, A82593, AR062872, I14842, AR066490, AR017826, AB012117, I18367, A63261, A70867, X68127, AR008277, AR008281, AR008408, AR016691, AR016690, U46128, A85396, AR066482, A85477, A86792, X76012, A64136, A68321, AR060133, D88507, AF213384, I79511, X93549, X82834, AF123263, L36913, AR032065, U79457, and AR008382.

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| HNGKF83 | 4638 | 780453 | 1 - 608 | 15 - 622 | AA766221, D51799, AA305409, D59859, D59610, D59619, D80210, D80240, C14389, D51423, D80166, D80253, C14331, D80439, D81030, D80219, D80195, D58283, D80212, D80366, D51060, D80188, D59467, D80248, D80022, D80227, D80391, D80164, D59275, D80043, D59787, D59502, D80241, D80038, D80269, D57483, C14014, D59889, D81026, D50995, D80196, D80133, D51022, D50979, D80024, D80268, D80522, D59927, D80247, AA514186, C15076, AA305578, D80193, D80045, AA514188, D80251, D80378, AW360811, C14429, AW177440, D80302, AW178893, D80157, C75259, AW377671, AW375405, D51103, T03269, D51759, AW178906, AW366296, AW179328, AW360844, AW378534, AW360817, AW375406, AW179332, AW377672, AW179023, AW178905, AW378528, AW178762, C05695, AW378532, D59373, AW176467, AW177501, AW177511, T48593, D80134, AW352171, AW377676, D59653, AW352170, AW177731, D80132, AW178907, AW179019, AW179024, D58253, C06015, D51250, AW178983, D45260, AW360841, AW177505, AW352120, AW367967, AW179020, AW178775, AW369651, AW178909, AW177456, AW179329, AW178980, AW178914, AW178774, AW177733, AW178908, AW178754, AW179018, AW352158, AW352117, H67854, AW360834, AI525920, D80949, D51079, AW179004, D80228, AW367950, AW179012, AW378543, AW378525, AW378540, AW352163, AW177728, C03092, H67866, AA809122, D59627, C14973, D80168, T11417, AW352174, C14298, AW179009, D58246, AW178781, AW178911, AI525923, AW177722, F13647, AI525917, AI910186, AW178986, D81111, D80064, C14407, AI905856, C14344, D51221, T03116, D58101, D80258, D59317, D80014, D59474, C14227, D59503, AW378533, AA514184, C14957, AW177508, D60010, D60214, D51213, AI535686, AI535850, AW177734, AW177497, D59551, AI525235, AW177723, AI525227, C14046, AI557774, AI525912, D45273, AI525215, AI525242, AA285331, AW378542, AI557751, AI525925, AI525222, Z21582, AW378539, D51097, AI525237, AI525928, AI525238, D51053, H67858, C04682, AW360855, AI525239, D51097, AI525237, C16955, Z33452, C05763, T02974, T03048, AI525216, Z30160, T02868, N66429, AA305720, A62298, AR018138, AR008278, AF058696, A84916, A62300, AB028859, AJ132110, A82595, AR060385, AB002449, D26022, X67155, A25909, Y17188, A94995, Y12724, I50126, I50132, I50133, A67220, D89785, A78862, D34614, AR008443, AR066488, AR016514, AR060138, A45456, A26615, AR052274, D88547, A43192, A43190, AR038669, Y09669, AR066487, X82626, A30438, I82448, I14842, AR054175, D50010, Y17187, A63261, AR025207, AR008277, AR008281, AR066490, AR008408, A70867, AR062872, I18367, AR016691, AR016690, U46128, A64136, A68321, D13509, AR060133, I79511, X68127, AB012117, AF123263, AR032065, U79457, AJ000347, and AR008382. |
| HNGKG43 | 4639 | 958487 | 1 - 782 | 15 - 796 | |
| HNGKG61 | 4640 | 860317 | 1 - 408 | 15 - 422 | |
| HNGKH04 | 4641 | 926987 | 1 - 421 | 15 - 435 | AC002041, AC006352, AJ239321, AC002038, AC006359, and AC004057. |
| HNGKI30 | 4642 | 860205 | 1 - 314 | 15 - 328 | T05706, A61271, AF134707, and A61272. |
| HNGKI36 | 4643 | 784854 | 1 - 598 | 15 - 612 | AC005939, and AC007488. |

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|---|---|---|---|---|---|
| HNGKI90 | 4644 | 787378 | 1 - 224 | 15 - 238 | AC022517. |
| HNGKI93 | 4645 | 791671 | 1 - 502 | 15 - 516 | |
| HNGKJ01 | 4646 | 915231 | 1 - 682 | 15 - 696 | |
| HNGKJ38 | 4647 | 806053 | 1 - 619 | 15 - 633 | |
| HNGKJ51 | 4648 | 883072 | 1 - 690 | 15 - 704 | |
| HNGKK35 | 4649 | 806051 | 1 - 281 | 15 - 295 | AC005940. |
| HNGKO11 | 4650 | 966093 | 1 - 301 | 15 - 315 | |
| HNGKP29 | 4651 | 860305 | 1 - 285 | 15 - 299 | |
| HNGKS06 | 4652 | 974356 | 1 - 387 | 15 - 401 | |
| HNGKT08 | 4653 | 958311 | 1 - 496 | 15 - 510 | |
| HNGKT69 | 4654 | 860302 | 1 - 675 | 15 - 689 | |
| HNGKUJ04 | 4655 | 926948 | 1 - 301 | 15 - 315 | |
| HNGKV01 | 4656 | 915218 | 1 - 266 | 15 - 280 | |
| HNGLA54 | 4657 | 860206 | 1 - 146 | 15 - 160 | |
| HNGLC01 | 4658 | 915288 | 1 - 565 | 15 - 579 | AA773098, AI800343, AI743899, R84528, L35485, AF011889, and Z84466. |
| HNGLC46 | 4659 | 775300 | 1 - 341 | 15 - 355 | AL096867, and AB020858. |
| HNGLD34 | 4660 | 830026 | 1 - 299 | 15 - 313 | AI351206. |
| HNGLE25 | 4661 | 860260 | 1 - 725 | 15 - 739 | |
| HNGLE52 | 4662 | 835972 | 1 - 727 | 15 - 741 | AL049691. |
| HNGLE74 | 4663 | 860263 | 1 - 729 | 15 - 743 | |
| HNGLF03 | 4664 | 922969 | 1 - 610 | 15 - 624 | |
| HNGLF08 | 4665 | 958312 | 1 - 1309 | 15 - 1323 | AA149651, AI417864, and AA151561. |
| HNGLG06 | 4666 | 839088 | 1 - 676 | 15 - 690 | AA654505. |
| HNGLH72 | 4667 | 785570 | 1 - 704 | 15 - 718 | |
| HNGLH82 | 4668 | 954140 | 1 - 726 | 15 - 740 | |
| HNGLIJ04 | 4669 | 954943 | 1 - 608 | 15 - 622 | AL132799. |
| HNGLJ20 | 4670 | 806045 | 1 - 535 | 15 - 549 | AA297666, AI859438, AI733856, AA526099, AL046519, AA503298, AA643770, AA721645, AW020992, AA832175, AI244157, AI755214, AA640430, AI754567, AW302659, AW302705, AL079734, AA640410, AI380617, AI754105, AI349817, AI984168, AA176978, AI654247, AI469599, AA468505, AW268757, AI679045, AA167792, AI251203, AW190484, AW300650, AA904211, AW151870, AA584620, AA053463, AA857486, AW268954, AI792529, AA652834, AI610737, AW001268, AW004884, AW304805, AI251284, AI345827, AI250552, AW085718, AA135761, AI371208, AA299589, AI565126, AA405726, AW270771, AI251034, AW274350, R62710, AI281561, AA856961, AW338179, AA548610, AA833896, AI537995, AA621381, AI284543, AI061197, AA916171, AA833875, AL135377, T03583, AW303098, AA955031, AI130709, AA492105, AI087133, AI289447, AA133013, AA630854, AA223174, AI356440, |

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| HNGLK13 | 4671 | 785685 | 1 - 306 | 15 - 320 | AW157005, AA487475, AL038842, AA659333, AI620992, H07953, AI254779, AI249688, AI247101, AA251356, AA757661, AA765170, AI978718, AI567712, T69896, AA564570, AA947374, AC005102, AC004386, AL121595, AC002418, Z98745, AF117829, AC006509, AC005015, AC005678, AC006013, AP000081, AC004458, AC002511, AF069291, AI035249, Z98742, AL021368, AC005939, AC005076, AC004682, U78027, AC006512, AL035422, AC012099, AP000959, AC004985, Z97053, AL034408, AC004087, AL034402, AL079304, AL096817, AC002302, AC006026, AC006312, AC004801, AL121871, Z82176, AL121657, AC005005, AC007437, AC002349, AC005552, AL132987, AP000401, AC004025, AF001549, AL035420, AC006480, AL033375, AC006327, AC005482, AC004003, AP000500, AC007344, AC004817, AC007270, AL031055, AC004383, AL122020, L78810, Z98744, AC007617, AC004448, AD000092, AC006536, AC004954, AI110502, AC008372, AC002464, Z84466, AC005028, AC006050, AC006116, AL022165, AC005900, Z93931, AC005527, AC002287, AC007537, AI031010, AC006952, AL031294, AL139054, AL008583, AC007051, AC004125, AC005751, Z96050, AC004056, Z94721, AC004000, AL133371, AL049742, AC004797, AP000088, AC004209, AC008064, AL034376, AL109952, AL031407, AC007686, AC004103, AP000356, AD000091, AC007919, AC007380, AL121652, Z95114, AC002288, AE000659, AC005529, AC007242, AC005697, AC003667, AC005378, Z84476, AC005375, AC007685, AP000345, AC000052, AL049198, AP000555, AP000514, AC006840, AC005940, AC004617, AC005235, AC004675, U85195, AC007227, AC004499, AE000658, AC004686, Z84572, AC004024, AL096701, AF088219, AC005570, AC005094, AC005476, AC005828, AC005332, AP000359, AP000228, AL133163, AC007666, AL133448, AC006581, AC007436, AC002432, AC002301, AC007688, Z97630, AF196779, AC008009, AC005971, AC005049, AL049776, AC006441, AC004815, AP000245, AC003091, AF141309, AL078583, U47924, AL096706, AL035427, AL031575, Z93244, AC007877, AL033397, Z95126, AC003070, AP000353, AC006141, AC002559, AC005031, AC005261, AC009946, AP001053, AL132712, AP000072, AP000269, AL031657, AC004859, Z93020, AC005297, AL008582, AF207550, AR036572, U91328, AL050318, AP000103, AC007363, AC000393, AC004827, AC008920, AC003991, AF064860, AC004832, AC005035, AC007637, AC005484, AL050306, AC004019, AP000032, AC004526, AC005946, U80017, AL121694, AC005386, AL031722, AC005696, AC002549, AC006960, AC000026, AL049757, AC004999, AL022237, AL133500, U07562, AC008063, AC008079, AC005089, AC005348, AC005736, AI031255, Z98304, AI031255, and AC004584. |
| HNGLK65 | 4672 | 795280 | 1 - 508 | 15 - 522 | AL034431, and AL050317. |
| HNGLK90 | 4673 | 795225 | 1 - 658 | 15 - 672 | |
| HNGLL03 | 4674 | 923028 | 1 - 408 | 15 - 422 | |
| HNGLL11 | 4675 | 966105 | 1 - 397 | 15 - 411 | |
| HNGLL24 | 4676 | 859922 | 1 - 635 | 15 - 649 | T18597, R29657, AA585098, AA585325, R45895, C15406, D59751, C15069, D53161, AA585101, |

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| HNGLL31 | 4677 | 789193 | 1 - 402 | 15 - 416 | D57491, R28735, R29445, AI557262, AI557864, Z32822, R28965, Z32887, AI525500, R28892, AI541356, AI541517, AA585155, D60765, AA585378, AI541365, D54897, AI526140, AI557740, D61185, Z28355, AA585439, D59436, AA170832, C15120, R28967, R29218, AI541205, D60844, AI526078, AI525556, AI557727, AA585476, AI557731, R28895, AA585329, AI541535, AI546971, AI526184, AI525316, AI557787, AI546999, AA283326, AI541383, D53447, C16294, C16315, AI546875, D52835, AI547250, AI557763, D61254, AI557734, AI526016, D53472, AI557084, C16293, C16292, AI541013, AI547039, D55233, AI541346, AI546945, AI525306, C16300, AI541374, AI557155, C15762, AI557758, AI557809, AI525431, AI557807, AI547196, AA585356, AI557718, AI541034, AI526191, C16305, AI541523, Z30131, AI546921, AI557408, AI557602, AI526194, C15737, AI540903, AI541307, AI525339, AI546996, AI540067, R29179, AI546891, AI547006, Z33559, AI557279, D57186, AI541321, AI540974, C16296, D60730, R29177, C14208, AI525320, AI557533, AI547202, AA585453, R29262, AI535639, C16290, AI557808, AI526113, AI541527, D51433, AI536138, AI526024, D54850, AI525856, AI526158, AI535660, AI526109, AI546829, R29172, AI557039, AI526112, D59458, AI526176, AI525302, AI556967, T19407, AI526187, AA585430, AI557264, AI541422, AI526073, AI526180, AI547137, AI541510, AI546831, T41289, AI526195, AI541353, AI525656, AI541345, AA174170, C14322, AI526117, AJ239433, AA585117, AI541027, AI547189, AI525286, AA514191, AI541492, AI524891, Z36724, AI540920, AI525332, C14391, T41329, AI557041, AI557082, C14723, AI557238, AI524904, AI546828, AI557852, AI541506, AI541415, AI541515, AA585434, AI557799, AI546855, AI541048, AI557285, AI557317, AI557786, AI546901, AI524890, AI541402, AI525168, AA585440, AI526205, AI526146, AI525076, AI541514, AI541017, AI540882, AI546954, AI541390, AI557810, AI547140, AA585389, AI525114, AI547026, AI541423, AI557785, AI541508, AI541516, C14210, AI541075, AI540944, AI557796, D61060, AI541450, AI526169, AI525653, AA585420, AI547071, AI547158, AI557802, AI541410, AR062871, A25909, AR038855, Y09813, X82786, X81969, Z32836, U94592, AR054723, AJ244005, Y16359, AF082186, D50010, D13509, AJ244004, A20702, AR062872, AR062873, A20700, A43189, A43188, AR038762, D78345, AR017907, AJ244003, X55486, X76012, AC005913, A98420, A98423, A98432, A98436, A98417, A98427, AR031358, AR031365, A98767, A93963, A93964, I63120, AJ244006, AJ243486, AR017826, AR003381, Z30183, A62298, AR050070, A82595, A82593, AF213384, AF006072, X82834, and L36913. |
| HNGLL41 | 4678 | 845274 | 1 - 774 | 15 - 788 | AI583390, AA128511, AA502207, AA709362, M87890, S42652, AL022313, M87914, S42653, AC003101, AC004447, AL080243, AL031848, AL033527, AC005529, AC005288, AC004834, AC005776, Z99916, AC005632, AP000704, AC002352, Z85987, AC003010, AC007386, AF111167, AC004686, AC004983, AC005694, AC000379, AC006480, AC005899, AC005527, AP000501, AC011331, U95739, AC007227, AL022315, AC004953, AL080317, AC002312, AC004816, AC005837, AC007565, AC005736, AC005041, AC002565, AC005081, AF053356, |

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| HNGLL67 | 4679 | 860253 | 1 - 405 | 15 - 419 | AC004707, AC004531, Z84476, AC005773, AC000388, AC005747, AC006285, AC004662, AF001549, AL022316, AC005513, AC003110, AI109627, U63721, AC007276, AL109865, AL049553, AC002407, Z83844, AL023799, AC004653, AF111168, and AL049758.<br><br>AA658934, AA496268, AI923052, AW069227, AW316599, AI634187, AI457313, AA452325, AW247389, W96277, AA020873, AA947369, R70883, AA614647, AA077637, AA579399, AA501460, AI270647, AI567391, AA652910, AA620510, AA314338, AT798569, AW405593, AA374797, AA558366, H40478, AA363957, AW408767, T92394, AI699049, AW265688, AA226357, AA357850, AA226356, AA558404, AI004740, N86089, AA747609, AA584484, AA613623, AA493947, AI583978, F16409, AI359200, N25079, U95737, AC004216, AC002351, AC022517, AC007878, Z95152, AC002300, Z93930, AC009399, U07562, AL049832, AC003982, Z92542, AL022165, AC005274, AL022578, Z84466, AC004832, AC005799, AC003664, AC005697, AL031311, AL110502, AL049856, AC004782, AC006965, AL110963, AC004020, AL050307, AC007425, AC004757, AC005962, AL021391, AC004554, L78810, AF207550, AC006449, AL022326, AL031575, AC007684, Z82203, U91321, AF088219, AL031659, AL133355, AC007773, AC005183, AC007011, AC007238, AL031733, AC005018, AI008730, AL049766, AC005728, AC002299, AC004476, AC003957, AC004033, AL135960, AJ131016, AC002381, AC005237, Z82217, AC006011, AL109759, AL133163, AL136504, AC005670, AL031737, AC005332, AL050321, AC007386, AL096818, AL033521, AC004820, AC005486, AL049760, AC002312, Z83822, AL023877, AC007546, Z97987, AL030996, AC006236, AC002477, AC007652, AL034423, AC004098, AC006050, AL008718, AL008719, AL049733, Z95116, AC006017, AC006071, AC005476, AC005155, AC003983, Z83826, Z84487, AC004408, AL023315, AL049650, AL035405, AC005702, AL049536, AL022400, AI031277, AC004813, AC002091, AL022322, AC007314, AC007216, AC006060, AC005844, AL049830, Y15994, AL022345, AL022721, AL109839, AF031076, AC008249, AC005342, AC005859, AL049779, U95742, Z94044, AL035400, AC003687, AC011311, AF152365, AL031432, AC005668, AC006530, AL078638, Z93242, AL049759, AC007868, AL035634, AF030876, AL049709, AC006039, AC003684, AF031078, AL022158, AL030995, AC005081, AC007387, AC007539, AL035695, AF129756, AC004973, AC009784, AC002390, AC007880, AL049869, U47924, AC005411, AC005250, AC005409, AC006130, AC004601, AC005597, AC007999, AL031178, AL022396, AC004966, AC003682, AC002073, AF111168, AC007376, AL031295, AL117258, U07000, AL021808, AC005284, and AP000346.<br>AL023574, |
| HNGLL91 | 4680 | 789743 | 1 - 407 | 15 - 421 | |
| HNGLM06 | 4681 | 919222 | 1 - 126 | 15 - 140 | |
| HNGLO10 | 4682 | 963504 | 1 - 562 | 15 - 576 | D59859, D51799, C15076, D59502, D80195, C14389, D80164, D80038, D59275, D80227, D58283, D80022, D80166, D80193, D59619, C14331, D80210, D80391, D80240, D81030, D59787, D51423, D80253, D80043, D80269, D80212, D80196, D80188, D50979, |

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| D80219, D59927, D57483, AA305409, D80378, D80366, D59889, D50995, D80024, D80045, D59610, C14429, D51060, AW178893, D80241, AA305578, C14014, T03269, D51022, AW179328, C75259, D81026, AW177440, AW378532, AA514188, D80251, D80248, D80134, AW178775, D80522, D52291, AW369651, D59695, D80064, AW352158, AW178762, D51250, AW360811, AA514186, F13647, D80133, AW177501, D58253, AW177511, D80302, AI910186, D80949, C14298, AW375405, D80168, C05695, C06015, C14227, D81111, AW377671, D80268, C14407, D80132, AW366296, AW360844, AW360817, AW352117, AW375406, AW378534, AI905856, AW176467, AW179332, AW377672, AW179023, AW178905, AW378540, D80439, D80247, AW352171, AW377676, AW352170, AW177731, AW178907, AW178906, AW179019, AW179024, Z21582, D59373, AW177505, AW360841, AW179020, AW178900, AW177456, AW179329, AW178980, D51103, AW177733, AW378528, AW178908, AW178754, AW179018, AW352174, AW367967, AW360834, D80157, AW179004, T11417, AW179012, AW178914, AW378525, AA285331, D59503, D51097, D51759, AW177728, D58246, AW179009, AW177722, AW178774, AW178911, AW352120, D80258, D59653, AW178983, AI557751, D59627, C14077, T48593, AW178781, AW352120, D80258, D59653, D59317, D58101, AW177723, D45260, H67866, AW367950, AI525923, H67854, AI557774, C03092, T03116, AA809122, AI535850, AW378533, AW177508, D51213, AW178986, AW177497, D45273, AI535686, D59551, AI525917, T02868, AA514184, D80014, C14973, AW177734, AI525920, C14344, D51221, D59474, D60010, D60214, AI525227, C14046, C14957, AI525235, T03048, AI525925, AI525242, AI525215, D59976, AI525912, AW378542, AW378539, C16955, C05763, Z33452, T02974, AI525237, H67858, AI525222, AI525928, C13958, AR018138, A84916, AJ132110, A62300, A62298, AF058696, X67155, Y17188, D26022, A25909, AR008278, AB028859, A67220, D89785, A78862, D34614, D88547, I82448, X82626, Y12724, A82595, AR025207, AR060385, AB002449, A94995, AR008443, AR016808, AB012117, I50126, I50132, I50128, I50133, X68127, AR066488, AR016514, AR060138, A45456, A85396, A26615, AR052274, AR066482, A44171, A85477, I19525, A86792, U87250, Y09669, AR066490, A43192, A43190, AR038669, I14842, X93549, AR066487, A30438, I18367, AR054175, D50010, Y17187, D88507, A63261, AR008277, AR008281, A70867, AR008408, AR062872, AR016691, AR016690, U46128, D13509, I79511, A64136, A68321, AR060133, AF135125, U79457, AF123263, U87247, AR032065, AB033111, X93535, and AR008382. | | | 1-431 | 15-445 | |
| | | | 1-728 | 15-742 | |
| T84380. | | | 1-634 | 15-648 | |
| Z59015. | | | 1-653 | 15-667 | |
| | | | 1-757 | 15-771 | |
| AC002103, and AC000401. | | | 1-587 | 15-601 | |
| | | | 1-609 | 15-623 | |

| HNGLO70 | 4683 | 779223 | 1-431 | 15-445 |
| HNGLO80 | 4684 | 775504 | 1-728 | 15-742 |
| HNGLO86 | 4685 | 780484 | 1-634 | 15-648 |
| HNGLO92 | 4686 | 924891 | 1-653 | 15-667 |
| HNGLR39 | 4687 | 835586 | 1-757 | 15-771 |
| HNGLR91 | 4688 | 789707 | 1-587 | 15-601 |
| HNGLS86 | 4689 | 784860 | 1-609 | 15-623 |

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| HNGLT67 | 4690 | 958777 | 1 - 634 | 15 - 648 | |
| HNGLX63 | 4691 | 934371 | 1 - 591 | 15 - 605 | AC004818. |
| HNGMA01 | 4692 | 915306 | 1 - 410 | 15 - 424 | H67866, AA504865, AI699049, T11828, AI004740, AA316036, AA853861, AA721998, AA714073, AA831801, AA626595, T03928, AW089950, AA832016, AA297496, R16258, AA662614, AW019964, N63755, AA256107, R97626, AI955465, AA525407, AA827383, AW057717, AA628740, AD000833, AC004087, Z82244, AL031431, AI139054, AL049570, Z93017, AC007221, AP000355, AL078581, AL031680, AP000248, AC006545, AL049869, AC006546, Z85987, AC005191, AL021154, AC006006, AC004494, AC004067, AC004224, AC007030, AC020663, Z99716, AC006312, AC005940, AC005914, AC007536, AL031311, AL109627, AP000696, Z69042, M13792, AC007766, AC005291, AL031279, AC006211, AL012384, AC008009, AL031003, Z97056, AL133448, AL008583, AC002059, AL096702, AC006376, AC004263, AC005316, AF109907, AC004382, AC005546, AC005071, AL023807, Z96074, Z93020, AC006372, AC007021, AL109956, AC005901, AC005696, AL031728, AC002375, AL034549, AC004242, D88270, AL049569, AC002430, AC004131, Z84487, AL035659, AF196969, Z97198, AC007384, AC005156, AC007376, AC005913, AC006441, AC008015, AC005519, AC004832, AL022336, AC005792, AL033527, AC002543, Z68331, AC012085, U95742, AL022312, AP000023, AC006057, U66061, AC002350, AC006430, AF001548, U73330, AP000008, AC005317, U82668, AC008055, AC006544, Z98051, AP000466, AC007686, AC003108, AP000704, AC006450, AC000025, AC005839, AC011331, AC004585, AL022313, Z83826, AC004671, AF001550, AC004125, AL035072, Z98941, AC004920, AL022162, AC005154, AC005247, AC005220, AC004158, AL035420, AC006965, AC005509, AL033377, AP000505, AC006042, AC007429, AC006146, AL133163, AC005622, AC004253, AL031657, AC004099, AC005670, Z82217, AL137447, I34294, AC005632, AC006530, AC005730, AC005005, Z82215, AC005874, AF134471, Z83840, AC005081, and AC005971. |
| HNGMA49 | 4693 | 860244 | 1 - 324 | 15 - 338 | AW069159, AA525760, AW020321, D80522, AA468131, AA468022, AI866160, AA714110, N55508, AA666332, AI828733, W03286, AW327868, D80043, AW277171, AL038799, D80188, AW401408, D80251, AL120959, AI561097, D80366, D80253, AI470431, AW089101, AA846952, AA449594, AA092078, AA668807, AW168420, AA502858, AI912638, AA536016, AI751216, AI470437, AA303007, AI559251, AW380254, AW055226, AL119691, AA083379, AA326372, AW189113, AA487567, AW103509, N40815, AW103758, D80247, T11417, AA188670, D58283, AW117951, AI124610, AI817976, AA220943, AI674174, D50979, N73855, AA809122, AA502860, D59474, AA446544, AI472222, C16955, D80014, AA572773, AA203135, AA181823, R95139, AI932599, AA312559, AL038072, AA428545, AW148792, AA828781, AA828758, AA826134, AA828771, AA828802, F01109, AI309375, AA297098, AA853836, F32808, W05405, AA503258, AA515753, AA302973, AA984258, AL044904, AI254913, AA598551, AI357924, AW275425, H67854, AA706480, AA657459, AA828227, AL135743, T08298, AA953609, AI969436, AA587517, AI809745, AL038705, AW271235, AA167284, AI025864, |

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| HNGMB26 | 4694 | 860166 | 1 - 305 | 15 - 319 | AI560085, AI084348, D57483, AAS84667, AI818737, F13647, AI122618, D51799, C14389, AW043636, AI589461, AI589230, AA610373, AA525926, AI027555, AA769402, AI792957, AI800168, AI436601, D80269, H67866, AA084721, AA745475, D80439, D58246, D81030, D59889, AC004695, AC006582, AC004998, AF200465, AC005519, AC002565, Z82901, AL096803, AL049697, AP000967, AC004126, AC004686, AL078463, Z95152, AC004662, AC005373, AL031775, AC004035, AC004864, AC005993, AC004525, AC005386, AC002303, AC007283, AC006120, AP000555, AC005104, AC007324, AC007100, AC008101, AL022397, AL135959, AC006006, AC009247, Z84469, AL034417, I56088, AC004019, Z97196, AL035695, AC004815, AC005288, AP000496, AC005230, AC005291, AF196972, AF207550, AL031009, Z69713, AF107045, AL021878, AC007993, AF053356, U78027, AF029750, AC003101, AL080243, AC006203, Z84476, AC007021, AL035246, AL035422, AC004865, AL035045, AP000048, AC003042, AL031447, AF030453, AP001067, AC004854, AL035555, AL117352, AL096791, AL049646, AC004526, AC003963, AL031777, AL035653, AC003029, Z98050, AC005479, AC007162, AC005180, AC007541, AC006571, AC006387, D83253, AP000298, AC005567, AL031680, AC004910, AC004220, AF064865, AL031667, AL031589, AF222684, AL121603, AD000833, AF141308, M90058, L35930, Z69917, AD000812, AC004755, AC005624, AC006275, AC002389, Z82190, AC006347, AL049549, AC002126, AC006468, AP000504, AP000113, AL034412, AC005166, AL008730, AL121820, AC004806, AL121756, Z97180, AC004056, AL022722, AL031668, AC004701, Z82198, AL079342, AC004594, AL034548, AC022517, AC004957, AP000350, AP000356, AC004816, AC005747, AL135747, AC006287, AF129756, AC009399, AL049835, AC006057, AC008125, AC008072, AC008072, AC004491, AC007370, AL121578, AC005512, AL109627, AC004895, AC005940, AC005829, AC007425, AC007435, AC005212, AL050325, AC004472, AC005158, AC005702, AF039907, and AC007226. |
| HNGMB33 | 4695 | 773752 | 1 - 529 | 15 - 543 | |
| HNGMC51 | 4696 | 860243 | 1 - 669 | 15 - 683 | R17449, and N87385. |
| HNGMD03 | 4697 | 923041 | 1 - 487 | 15 - 501 | |
| HNGMD04 | 4698 | 927026 | 1 - 467 | 15 - 481 | |
| HNGME93 | 4699 | 793483 | 1 - 528 | 15 - 542 | AA480977, AA805135, AI356458, AI521314, AI797957, AI809163, AI082368, AI672772, AW268815, AA709444, AA625108, AW205440, AI193354, AA810765, AA837382, AA480976, AI743503, and AC008119. |
| HNGMF04 | 4700 | 860242 | 1 - 705 | 15 - 719 | AA678970, AI054341, AI792623, AI054090, AI246061, F33126, AA278496, AL135605, AA135988, AI251944, AA135811, AW303098, AA714073, AA657910, AL037430, AA706202, AA515172, AI561210, AI434365, H72943, AI862790, W63553, AL133906, AL133902, AI302350, AA502813, AI636734, AI473549, AA378207, AA862029, AW026867, AA488419, AA527109, AA595504, AA297145, F08866, H24957, AA468975, AI049504, AW392414, AA024443, |

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| HNGMF11 | 4701 | 966114 | 1 - 147 | 15 - 161 | AC006566, AC006484, AL031407, AC006509, AL122020, AC005386, AC006115, AL109952, AC008064, AC006512, AC006026, AL031010, AC007934, AC005914, AC002349, AL024508, AL022165, AL033397, AL035427, AC002299, AL121757, AC007279, AC005284, AL133371, AL096703, AL009051, AL034427, AF152363, AC002551, AC005023, AC004910, AC007363, AC002418, AC007436, AL133448, AC005252, AC004160, AC004386, AC005697, AL031055, AC004125, AC006277, AC002086, AC004682, AC004448, AL022578, AC004106, AC006013, AL022151, AC007686, AF001549, AL008636, AC002511, Z93241, AC007993, AC006840, AC012099, AC006480, AC007671, AL109628, AC007688, AL079304, AP000228, AC005375, AP000140, I34294, AP000088, AC004584, AC004985, AL049776, AC002302, AP000692, AC004551, AC004832, AL109939, AB017602, U95743, AL021879, AC005102, AC005274, AC002432, AC005486, AL121694, L34635, AC005971, Z82176, AC005046, AC004458, AC005255, AC004087, AC005037, AC005903, AC000120, Z97053, AP001053, AL079305, AL132985, AC004891, AC005231, AC004797, Z81364, AC002106, AI133241, AC005409, AC007543, U66061, AC006449, AC005237, AC006299, AC007103, AC005736, AL008583, Z82208, AF108083, AC005913, AC005235, AC005823, AC005788, AC006960, AL079342, AC004263, AL050306, AC002524, Z93017, AC008055, AC005081, AL050343, AB020860, AC006390, AL022312, AL023580, Z99128, AC008637, Y11107, AL008637, AP000116, AC004025, AC005192, AC004922, U66532, AL132987, Y11107, AL008637, AP000116, AC004025, AC005192, AC006080, AP000550, AP000178, AC009178, AC006578, AC006578, AC008018, AC000039, AL023805, AC002433, AC005189, AC003969, AC000353, AB023054, M15027, AL031846, AL031255, AC005484, AC005067, AC004148, AC007774, and AC005015. |
| HNGMF46 | 4702 | 795236 | 1 - 443 | 15 - 457 | D30932, R14811, F06803, Z44371, H29207, AC006359, AC002504, and AP001172. |
| HNGMF79 | 4703 | 772974 | 1 - 719 | 15 - 733 | |
| HNGMF94 | 4704 | 966091 | 1 - 583 | 15 - 597 | |
| HNGMG06 | 4705 | 934318 | 1 - 380 | 15 - 394 | |
| HNGMG08 | 4706 | 958361 | 1 - 378 | 15 - 392 | |
| HNGMH80 | 4707 | 775503 | 1 - 532 | 15 - 546 | AA136477, AL049742, AC006511, AL031295, AL033377, AL031985, AL109963, Z95116, AC006530, AC004963, AL080243, AC004149, AC004106, and AC002565. |
| HNGMH93 | 4708 | 791725 | 1 - 415 | 15 - 429 | AC004147. |
| HNGMJ04 | 4709 | 923011 | 1 - 270 | 15 - 284 | |
| HNGMJ89 | 4710 | 786340 | 1 - 566 | 15 - 580 | |
| HNGML07 | 4711 | 952224 | 1 - 654 | 15 - 668 | AC002484. |
| HNGML53 | 4712 | 860240 | 1 - 654 | 15 - 668 | AC007787. |
| HNGMM51 | 4713 | 860201 | 1 - 488 | 15 - 502 | AW239562, and Z83841. |
| HNGMM54 | 4714 | 933358 | 1 - 208 | 15 - 222 | |

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| HNGMM87 | 4715 | 806036 | 1 - 468 | 15 - 482 | |
| HNGMV73 | 4716 | 806000 | 1 - 510 | 15 - 524 | AW021116, AF111168, AC007221, Z98742, AC007649, AC005288, L78833, AL021939, AL121825, AC005484, AC004033, U29895, AC005562, AC005500, U80017, AC006966, AC002455, AC004820, and AC007151. |
| HNGMW52 | 4717 | 860231 | 1 - 583 | 15 - 597 | |
| HNGMW92 | 4718 | 790852 | 1 - 616 | 15 - 630 | |
| HNGMX80 | 4719 | 786255 | 1 - 312 | 15 - 326 | |
| HNGMX87 | 4720 | 835612 | 1 - 521 | 15 - 535 | W05155, AA195301, AA424985, AA234376, AA372119, AA724177, H72335, AA316629, and AC004126. |
| HNGMX91 | 4721 | 789680 | 1 - 330 | 15 - 344 | Z69714, and Z72521. |
| HNGNA23 | 4722 | 779201 | 1 - 122 | 15 - 136 | AA582993. |
| HNGNB01 | 4723 | 915258 | 1 - 70 | 15 - 84 | |
| HNGNE65 | 4724 | 963425 | 1 - 566 | 15 - 580 | Z54072. |
| HNGNF40 | 4725 | 861967 | 1 - 676 | 15 - 690 | AL022241. |
| HNGNG37 | 4726 | 847818 | 1 - 561 | 15 - 575 | AA579385. |
| HNGNH03 | 4727 | 922831 | 1 - 566 | 15 - 580 | T07903, AI521042, AA135761, AA172103, AA484892, AA668421, AI445699, AL036536, F02264, AA768179, F04185, AA676592, AA846014, AI370470, AA610644, AA613761, H88641, AI205181, AA741403, AI298079, AA558366, AA664126, AA229422, R99076, N78600, AA552724, AA740571, AA297006, AA491767, AW151761, AI702049, AI758424, AA297195, AI002952, M77908, U91326, AC002544, 783840, Z82208, AL079295, AC005488, AL035086, AL035457, AL020997, AC007240, AL049830, AC007371, AC007227, AC007421, AC004583, AC005520, AC003043, AC005519, AC020663, AC006014, AC006468, AC007308, AC005722, AL049776, AC006387, AC007993, AL031848, AC002470, AP000008, AC006241, AL031291, AC005940, AC009516, AC004975, Z83826, AC003688, AL049872, AC004134, AF111168, AC004131, AC006948, AC005377, AL050318, AC006064, AC003665, AC004832, AC002553, AC005274, AC016025, AL096701, AL080243, AC007934, AC005859, AC007537, U91323, AC005014, AL132712, AL022323, AC007226, AP000553, AC002996, AP000569, AC003029, AC005971, U95743, AC002367, AC006088, AC005049, AC000134, AC004883, AL031767, AC005409, AL050348, Z99716, AC005031, AB023050, AC004222, U62293, AL121655, AC002350, AC004185, AL031659, AL022721, AC006160, AC005529, AC006077, AL008635, U80017, AC005914, AC007666, U85195, AC006211, AC005215, AC002059, AC006285, AC005057, AC004408, AC005822, AB014077, Z85986, AL132777, AC004854, AL121652, AC007566, Z98048, AC004526, AF196969, AC004895, AC005996, AC008044, AC003101, Z98742, AC006540, AC007774, AE000658, AC006138, AL008718, AL109758, AL078476, AC005620, AL121923, AC004531, AL049760, AC007546, AL022320, AL049694, AC005512, AF111169, AL031680, AL049540, AC005041, AL080160, AL020993, AL132718, AL034429, AP000114, AL096791, AC008372, AC003109, AC005479, AC004209, |

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| HNGNI04 | 4728 | 926985 | 1 - 480 | 15 - 494 | AC005565, AC000159, AC005067, AC006441, U07563, AL035070, AL035400, AL021707, AC005837, AC007792, AC006101, AC007263, Z29336, AC007207, AC006449, AC005666, AC005193, AC004382, AC007488, AF001550, AC004890, AC006511, U07000, AC006486, AC003098, AC000069, AC009247, AC005255, AC004663, AP000355, U95739, AC010077, AC009509, AL008708, AC005902, AC002525, AC002347, AC002351, AL109984, AC006121, AC005011, AL109963, AC006487, AC004797, AL022068, AC006312, AL022302, U62317, AC000353, AB023049, AP000090, AP000513, and AL121825. |
| HNGNI52 | 4729 | 781913 | 1 - 566 | 15 - 580 | AC000404. |
| HNGNI75 | 4730 | 860168 | 1 - 512 | 15 - 526 | |
| HNGNI94 | 4731 | 893899 | 1 - 357 | 15 - 371 | AC005356. |
| HNGNM24 | 4732 | 841902 | 1 - 300 | 15 - 314 | AA302963, AA559290, AA491814, AI754955, AI264743, AI358343, AA747276, AA682912, AW088202, AI284640, AA747480, AA804379, AI610159, F36273, R91994, AI580652, AA074130, AI801600, AW193432, AA708678, F23279, AL079812, AI053672, AI653886, AW303876, AI569086, F28576, AI749284, AI499938, AW247819, AI902694, AI049722, AI679045, AA515051, AI431303, AL046409, F32894, AI312149, F18974, AI281881, AA649642, AW238016, AW080134, T08914, F25276, AW236342, AL119691, AI471481, AI929531, AA306732, AL041412, AI254615, AI287964, AI688846, AA664535, AA503258, T53607, AA947547, AW273218, AI301700, AW419262, AA934680, AA714453, T40338, AA664407, AW029038, AL047643, AW301350, AW303196, AW193265, AI299050, AW274349, AI334443, AI358571, AI375710, AI357551, AI709365, AA747472, AI286356, AI252554, AA229785, AI350211, AA745582, AA977743, H64777, AA350859, AA663306, AW440976, W07122, AI291124, AW024008, AA744220, AA469451, AL041706, AI801591, AI761471, AA492132, AI339850, AI473943, AI567674, AI962050, AA252763, AA603445, H64560, AI446464, AW166815, AI446601, AI110770, AA533725, AW276827, AI079910, AA515435, AI291268, AI270248, AI287528, AA654968, AW162049, AW250970, AW062724, AI133164, AI537030, AW131034, AW104748, AW088058, AW023389, AI648558, AA441788, AI303008, AI452599, AL043721, AI289067, AA614069, AII84226, AA810318, T56067, AI937850, AI251002, AI567391, AA100599, AA501614, AI298710, AA557879, AI625244, AA557686, AA826303, AI499134, AL041690, AA371567, AA526339, AA659083, AW021747, AI367975, AA488395, AA578918, AI919029, AW440633, AI133636, AW406659, AI887483, AA133986, AA713815, F28776, AI469624, T07451, AI610920, F19012, AW339568, AI246796, AA483068, AL135643, AI624698, AW276435, AI061296, AW261871, AI687962, AW173651, AA878140, AA525190, AI287651, AI017024, AA975645, AI904894, AI379719, AA491762, AI568678, AI434695, AA584489, AA702023, AII43242, AI471543, AI205126, AI674873, AA085023, AA658093, AI281697, AA099892, AA152463, AA633936, AI423941, AI282832, AA225155, N25296, AI539563, AW440836, AA828704, AI890923, AW265385, AI469003, AI537955, AI917271, |

AI830390, AI653905, AW264959, AL041733, AA113186, AW265253, AI613280, F13749,
AI364809, T55213, F37169, AW072587, AI697369, AI824562, AA654771, AA908422, AF067844,
AC006333, AC004047, AC005081, AC006130, AC000353, AC009181, AC006257, AC007488,
AC007227, AC004485, AC006070, M87918, AP000142, AC004496, AC005393, Z94721, U66059,
U95742, AC007216, AC008173, AC002564, AL049860, AC001164, AC006323, AJ003147,
M37551, AC006543, AL033521, AC007735, AC004148, AL049745, AF064863, AL035461,
D87675, AC005839, AC006480, Z95152, AP001172, AC004799, AL049696, AC002133,
AC005246, AC007682, Z98036, AC006211, AC006544, AC002558, AC004746, Z83840,
AB020859, AL035089, AL035659, AP000474, AL121718, AC006111, AC005060, U47924,
AC004057, AC007191, AC004638, AC004217, AC002492, AC016025, AC004769, AC004895,
AF121781, AC006344, AC005003, AP000455, AC006277, AL109798, AC004167, U80017,
AL049869, AC006487, AC005740, AL023879, AL031054, AC004650, AL121577, AC004857,
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AL121603, AC002036, AC009178, AC005994, AC005065, Z74739, Z75746, AC007065,
AF165926, AF178081, AL034452, AC004518, AI006996, AC004019, AC007151, AL031388,
AC005295, AF110324, X87344, Z85986, AC002425, AC005940, AF001549, AC007064,
AL034418, AL136297, AL103244, AC004827, AC006128, AC005901, AL078462, AC004673, AC007845,
AC005274, D83989, AC006205, AP000044, AP000563, AC004695, AL031709, AC002117,
AC006251, AC004931, AC004841, AC020663, AC005822, AC005251, X75335, AL050333,
AC007677, AC002461, Z68323, AL008709, Z83001, AC006468, AL121823, AC008268,
AC005632, AL049557, AC006007, AC004885, AL080285, AL133238, AL049766, AC004926,
AC002395, AL049823, AP000350, Z84497, AC006121, AC005002, AP000090, AC002429,
AC006213, AC000121, AC007239, AC009501, AL022170, AP000459, Z68192, AC007193,
AP000031, AC005217, AL049757, AC005535, AC004519, AF077058, AC000378, AC005993,
AC003668, AP000211, AP000133, AL049569, AC004890, AL022323, AC005288, AC005193,
AC003085, AC007510, AC004975, AC005778, AC007541, AC009336, AL034406, AP000557,
AP000349, AL023876, AL078640, AC004417, Z82202, AL110502, AC004492, AC005154,
AL008728, AL121653, AD001502, AC009479, AL022476, Z84488, AJ246003, U91323, AC002994,
U18392, AC005527, AL021808, AC009479, AL135744, Z94044, AL078603, AF124730, Z82975, U35114,
AL109621, AL049562, AL031286, AC006208, Z94055, AC022517, AC006017, AC006045,
AC006001, AC000052, AC005237, X54181, AC006160, AC005808, X55930, AC004812,
AC006012, AL034451, AF201337, AC005598, AL031291, and AL121658.

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| HNGNO03 | 4733 | 860155 | 1 - 518 | | 15 - 532 |
| HNGNR04 | 4734 | 926870 | 1 - 599 | | 15 - 613 |
| HNGNS10 | 4735 | 963470 | 1 - 719 | | 15 - 733 |
| HNGNS58 | 4736 | 788971 | 1 - 306 | | 15 - 320 |

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| HNGNS90 | 4737 | 787388 | 1-453 | 15-467 | |
| HNGNV80 | 4738 | 908167 | 1-440 | 15-454 | |
| HNGNW04 | 4739 | 860199 | 1-439 | 15-453 | AI904944, AI799421, AI475294, N22501, AA827383, AA126221, AI520925, AL039309, H43183, AA524846, AI871691, AI671077, AA774119, AI446623, AW270429, AW270351, F23268, H59856, AA084320, AW129188, R31264, R66407, AA218684, AL138252, AIR05699, N71579, AA831801, H05066, AA171400, H24331, AW338376, AA230221, AI890297, AI819391, H22238, AA833016, AA577719, AA662431, R31260, T92237, H80621, AI683426, AI859744, F07564, AA228442, AA653291, AA368329, AW238495, AW019964, AI453160, AI564294, AA633197, AA632765, AI798242, AI471467, AA595656, AW265149, AA678616, H59611, AA610255, AL048002, AA831997, AA508882, H58393, H59651, AW439724, AA609826, AA558404, AL138065, AW151761, AA767257, AA579399, AI668566, N55515, AA434346, AW408767, AA628740, H15241, AA351808, AA569220, AW007424, AA664248, AI758858, F23221, AI889426, F04838, AI537800, AI860535, AI755057, AA454504, AA741301, T73016, AA664924, AA313078, H64715, AA578394, AW005974, W96522, AI821659, AI879951, AI246061, AI624379, AI927261, AA807704, AI469468, AA580572, AI275989, AI627917, AL079303, Z92542, AC005800, AC002312, AL133241, AC002433, AC008015, AL008638, AL031681, AC004549, AC006465, AC006959, AC002487, AC008928, AL049553, AC002375, AC007559, AC005608, AC006312, AL049694, AL121825, AC004738, Z74021, AF190465, AC004241, AC004616, AP000953, AC007130, AC005316, AC005317, AC002310, AC002301, AC005535, AC007226, AC007225, AC004653, AC006388, AL031588, AC006441, AL049569, AL049761, AP000952, AL121603, AC005082, AC007686, AC005740, AC004749, AC004231, AC012099, AL035603, AL023807, AC004650, AP000098, AC004448, U47654, AC005480, AC006344, AC004685, AC008080, Z95152, AC005067, U43572, A51133, A76958, M84472, AC000024, D87011, U95090, U34879, U82668, AC005696, AL022238, AC007401, AC005355, AC005365, AL049814, Z84719, Z97056, AL031729, AL080317, AL033504, AC006455, AC006039, AL135744, AL109628, AC002559, AC005017, Z98304, AL022237, AC006263, AC006966, AL023283, AC006208, AC004686, AL031587, AL133249, AC005189, AC002316, U62292, AC006254, AC004593, D86995, AL031728, AL132987, Z81369, Z68162, AC004185, AC006047, AC005775, AC003104, AP000694, AP000692, AC004797, AL035696, AC004953, AC009542, AC007263, AC009330, AC006065, AF109907, AC006130, AC004583, AL049565, AL109984, AC005378, AC004253, AC002094, AC006350, AF111170, AL035455, U96629, AL022165, AL022069, Z82244, AC004596, AC005773, AL031281, AL117694, AC004887, L44140, Z99716, AC004112, Z99943, AC004212, M22970, AF113129, AC003964, AC007308, AL021546, AC005206, AC005667, AL031659, AC003982, AC004706, AC007032, AL031848, AL023803, AC007684, AC005015, AL022329, AC002470, AC004882, U89387, AC007277, AD000812, AC005565, AC006162, AL035398, AC002126, AC012330, AC007708, AL034379, AC004999, Z95115, AC009288, AC005030, AC008132, AL117258, AL117258, AC007325, AC005598, AC007981, |

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| | 4740 | 783747 | 1 - 447 | 15 - 461 | AC005815, AB009589, AB000876, AC004181, Z73417, AP000702, AF095901, AL080245, AI096767, AC006077, AP000506, AC004991, Z93241, AF207550, Z82214, AC004812, Z82215, AC005913, AC005670, AB000882, AL031277, AC008273, AF017104, AC005837, AC005225, AC005863, AC007376, U91322, AC004019, Z97986, Z83847, AC005159, AL008635, AC002073, Z97054, AC001231, Z93023, AL133091, AC004213, AC002449, AC005529, AC000381, U93305, AP000509, AC004703, AC004804, Z83821, AL020991, AL035686, and U91327. |
| HNGNW85 | 4741 | 806018 | 1 - 683 | 15 - 697 | Z83846. |
| HNGNX37 | 4742 | 806042 | 1 - 706 | 15 - 720 | AC004549. |
| HNGNX65 | 4743 | 860158 | 1 - 507 | 15 - 521 | AC007376. |
| HNGNZ01 | | | | | AA853836, AL046225, AL045756, AL049569, AB023050, AP000511, AL031681, AC006946, AC004216, AC009501, AC002117, AL022165, AC006011, AC006057, AC005237, AC005179, AC004887, AC005102, AC005520, Z83846, AC004491, AP000350, U95090, AC004967, AC004617, AC005488, AC005037, AC006167, AC007193, AL033524, AC005082, AC003684, AC007021, AP000512, AC004832, AF064858, AF030453, AC005088, AP000065, AL049869, AL049843, and AC004408. |
| HNGNZ38 | 4744 | 790926 | 1 - 562 | 15 - 576 | AC000025, AC005527, AC002991, AC005529, X89398, and AC007637. |
| HNGNZ91 | 4745 | 839887 | 1 - 508 | 15 - 522 | AA923791. |
| HNGOA11 | 4746 | 966082 | 1 - 512 | 15 - 526 | |
| HNGOA82 | 4747 | 779154 | 1 - 435 | 15 - 449 | |
| HNGOB95 | 4748 | 791700 | 1 - 502 | 15 - 516 | |
| HNGOD68 | 4749 | 790805 | 1 - 288 | 15 - 302 | |
| HNGOE64 | 4750 | 860143 | 1 - 551 | 15 - 565 | |
| HNGOF50 | 4751 | 796548 | 1 - 501 | 15 - 515 | |
| HNGOF84 | 4752 | 782188 | 1 - 320 | 15 - 334 | |
| HNGOF85 | 4753 | 783717 | 1 - 792 | 15 - 806 | |
| HNGOG49 | 4754 | 971178 | 1 - 667 | 15 - 681 | U73641. |
| HNGOH42 | 4755 | 958943 | 1 - 506 | 15 - 520 | |
| HNGOI86 | 4756 | 806013 | 1 - 639 | 15 - 653 | |
| HNGOJ13 | 4757 | 921433 | 1 - 325 | 15 - 339 | |
| HNGOJ64 | 4758 | 860193 | 1 - 473 | 15 - 487 | D80134, D80164, T03269, D59467, C15076, D81030, AW178893, D58283, D59859, D80022, C14331, D80166, D80195, D80193, D59927, D51423, D59619, D80210, D51799, D80391, D59275, D80240, D80253, D80043, D59787, D80227, D59502, AW352117, D80269, D80212, D80366, D80196, D80188, AW177440, D80219, AW179328, AA305409, D80045, D80038, D57483, C14429, D50979, D50995, D59889, AW378532, D80024, D59610, C14389, C14014, AW178775, D51060, AI905856, AW360811, AW375405, AW178762, AW352158, AW377671, D58253, AW177501, AW177511, D51022, D80132, AW179332, AW366296, AW360817, |

| Name | | | | | Accessions |
|---|---|---|---|---|---|
| | | | | 15 - 258 | AW375406, AW378534, AW377672, AW179023, AW178905, AA305578, D81026, D80248, D51097, D80522, AW352171, AW377676, AW352170, AW177731, D80133, AW178907, AW179019, AW179024, AA514188, AW177329, AW178906, AW179020, AW360834, AW178980, AW177733, AW378528, AW178908, AA514186, D80302, AW178911, AW178914, D80268, AW367967, AW178774, D80439, D80247, T48593, D51103, C06015, AW352174, AW378533, D45260, D80390, AI525913, AI525923, AA285331, C03092, AI525917, AA514184, AI525925, A25909, Y17188, A84916, A67220, D89785, A62300, A6229R, A78862, D34614, D26022, AJ132110, X67155, D88547, AR018138, X82626, AR025207, Y12724, AB028859, AR008278, AF058696, AB012117, A94995, A85396, AR066482, A44171, AR008443, A85477, 119525, A86792, 150126, 150132, 150128, 150133, 118367, X93549, AF123263, AR066488, AR016514, A82595, AR060138, A45456, D50010, Y09669, AR060385, A26615, AR052274, AR066487, A30438, A43192, A43190, AR038669, AB002449, D13509, AB019242, AR066490, D88507, Y17187, AR008408, A63261, AR060133, A70867, AR062872, AR016691, AR016690, U46128, A64136, and A68321. |
| | | | | 15 - 717 | AC006274. |
| | | | | 15 - 356 | AW169469, AI648558, AA565844, AA491697, F32710, AA917906, N71340, N71390, AA584151, AA993165, H91358, AI653783, AA487995, AW193500, W24602, AW173443, AI925559, AA598617, AA487884, AL040948, W38468, AA479033, AA742775, R59868, T50568, AA721561, AA148656, T50436, AA361244, AA402102, AA922633, AA687542, AA229443, AI635819, AA424280, AI150131, AI914151, H80203, AA077646, T52997, AL048002, AI863176, AA649660, T86151, AL047480, T16065, AI557342, AI564215, AA348422, AI497727, W44607, N55012, R17793, AL138242, AI274006, AA470958, AI921692, AI744381, AI567831, AI445768, AA363150, AA586553, D25667, AA374525, AI889648, AI613487, AI336206, AA427747, AA679512, AI689135, AA010672, T61362, AA837739, AA493852, AA568314, AA491545, W79083, AA507990, AI912505, AI188963, AA078384, R30966, AA632482, AA984829, AW029626, AI888050, H73306, M77894, AI538433, R68503, AA632493, AA632484, AA384064, AA837796, AI885488, AA713534, AW236277, AA650348, AA845333, AA524504, H47461, AI754286, W45073, AI215784, H05449, AA526099, AI572680, R81455, AA632994, AP000558, AL035420, AC005183, AC009516, AC009582, AL079342, AC006031, AL079334, AC006487, Z93096, AC003025, AF139813, AP000356, AC006536, AC004228, AC005158, AC000387, AC004622, AL096791, AL035462, AL049569, AC000066, Z99128, AP000855, AC000120, AJ010770, AC000379, AL031276, AC002312, AC006042, Z68870, AL031589, AL009181, AL023284, Z97183, AL049694, AL035086, AP000317, AP000051, AP000119, AP000166, AJ006952, AC007263, AL080286, AC005837, AL132985, Z86090, AL096774, AC004134, AC005913, AC003071, AC005972, AC005578, AC000085, AC003693, AL121754, AJ006345, AC004701, AL109963, AC003417, AC002044, AL049856, AL035417, AL031670, AC005043, |
| HNGOK59 | 4759 | 789689 | 1 - 244 | | |
| HNGOK86 | 4760 | 784813 | 1 - 703 | | |
| HNGOL14 | 4761 | 860185 | 1 - 342 | | |

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|---|---|---|---|---|
| | | | | AC007358, AL033533, AC004596, AC003077, AI035587, AC004883, AC002430, AL031311, AC004895, AC007384, AC005011, AC005324, AF222686, AC005911, AL034402, AL031295, AC007666, AC008079, AC002543, AL031275, AC002040, Z98044, AC004659, AL033504, Z97055, AC005544, AL078581, AL020990, AL031775, AC003042, AC007324, AL031729, AL022313, AC008101, AC005186, AC006151, AC005823, AC007784, Z96622, AC005239, AC006049, AC004777, AC004143, AC005200, AC006365, AP000513, AC003036, AB023049, AF030453, AL034376, AF064861, AC005007, AC005225, AL049553, AC006445, AC007056, AC002117, AC002368, AC005249, AF195658, L34079, Z82182, AL022311, AL035681, AL050321, AC004451, AL008729, AL133485, AC005479, U95626, AC002994, AC008249, AC006459, AL049780, AC002470, AL034347, AC006059, AC004527, AP000227, AC005331, Z82173, AC005597, AL023575, AL034418, AC004587, AP000142, AP000087, AP000692, AF196970, AC002996, AP000090, AL031577, AC004675, AL122020, AC002553, AC004832, AC006226, Z98884, AC005237, AC007435, AF088219, AC005234, AL022476, AF126403, Z82184, AC004779, AC004107, AC005515, AC005253, AC000067, AC004398, AL035450, AP000300, AC004541, AL022315, AP000086, AP000045, AP000113, AL009051, AD000092, AL031864, AC004796, AC004815, AC004638, AC002331, AL035685, AC003108, AC007151, AC006600, AC008064, AC005291, AC005342, AL008731, M63796, AC003963, AL008725, AC005031, AL079339, AC002565, Z82202, AL096763, AC006012, AC004999, U80017, Z82194, AC005747, AL117694, AP000555, AC011604, Y08456, U62556, AC004159, AC004410, AC004475, and Z94161. |
| HNGOO22 | 4762 | 953888 | 1 - 143 | 15 - 157 | |
| HNGOP04 | 4763 | 926972 | 1 - 411 | 15 - 425 | AA631933, AI859906, AL049694, AC004974, AC007358, AL031680, AF178030, AC004851, AP000696, AP000697, AC007746, AC010197, and AA721512. |
| I.NGOP10 | 4764 | 963483 | 1 - 438 | 15 - 452 | AA424261, AA868202, AA639008, and AA721512. |
| HNGOS22 | 4765 | 860176 | 1 - 443 | 15 - 457 | AW148507, AA837087, AA126519, AW410354, AA664942, AA402129, AI537772, AA633762, AI341571, H25921, AA890425, AI096442, AW088581, R97336, AF034194, AF037630, AW027660, AW177790, AA380354, H95302, AA455483, AI623764, AA730422, AA070345, AW081303, AA324242, AA137013, AA551181, AA601356, AL021940, AL022396, AC003070, Z92542, AC005512, AP000193, AC005180, AP000117, L35667, AC004148, AC005483, AC007671, U85195, AC005181, AE000658, AC005520, Z97876, AC012384, AL117338, AC005513, AF135187, AC003104, AF129756, AL034549, Z98884, AC004453, AC005409, AC006045, AC008273, AC005736, AC005612, U73638, AC007193, AL022399, AL031848, Y14768, AC005751, AF172277, U51244, AC005042, AC005833, Z93017, U07562, AC007055, AC004685, AC004797, AL022238, U50537, AL023096, AC004874, AL049546, AC006578, AL031284, AB020865, AC004975, AC005037, AC006441, AC005305, AL049546, AC005668, U45984, AC006199, AL031432, AL022312, AC002468, AL031289, AL035078, AC004656, AC004694, AL022315, M58509, AC004799, AP000331, AP000501, AF030453, |

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|---|---|---|---|---|
| HNGOV03 | 4766 | 1 - 398 | 15 - 412 | AL031311, AC004634, Z29373, Z82243, AL034403, AL109963, AL021391, AC004812, AC005725, AC004542, AP000172, AL109977, Z83844, AC007736, AP000057, AF019413, AL133448, AP000125, AP000505, AL049570, AL008723, AC007151, AC007773, AL008732, AL096755, AF036405, AC005618, AL022328, Z82246, AL035458, AC03391, Y18000, AL008638, AC007687, AC006566, U80017, AC004686, AL009181, AC005258, AP000100, AL034548, AC002430, AC004881, U91326, AC007384, AC005088, AC007088, AL121580, AC007546, Z83843, AC005846, AC007533, AC006576, AL035045, AL020997, AL133245, AL035089, AC005028, AF001549, AC004019, AC007785, AC005535, AL031120, AC007731, AC002550, AC004655, AC004590, AC007214, AC005746, AC008115, Z82201, AC004414, Z97055, AL021397, U82668, AL049539, AC004876, AC006571, AC005138, AC005150, AL049712, AF205588, Z98200, AC003108, AL096701, AC004386, Z73417, AC004475, AC005777, AL132799, AC003002, AC005365, AP000221, AP000085, AF165142, AL031674, AC005070, AL031577, AL080317, AL137191, AL049871, AC002492, AC005071, AL022319, AL035691, AC006064, AC005696, AC005907, AC005778, AL035542, AL031230, AL031281, AC019014, AC006213, AC007371, AC006946, and U47924. |
| HNGOV65 | 4767 | 1 - 284 | 15 - 298 | AC005844. |
| HNGOW13 | 4768 | 1 - 408 | 15 - 422 | |
| HNGOY01 | 4769 | 1 - 680 | 15 - 694 | |
| HNGOY10 | 4770 | 1 - 372 | 15 - 386 | |
| HNGOZ17 | 4771 | 1 - 234 | 15 - 248 | AL031654. |
| HNGPH12 | 4772 | 1 - 421 | 15 - 435 | |
| HNGPI08 | 4773 | 1 - 681 | 15 - 695 | AA830964, R60323, AI536908, R73479, AA470779, AA113170, AW062702, AW029617, AC004953, AF024534, AC005086, and AL031588. |
| HNGPJ23 | 4774 | 1 - 697 | 15 - 711 | |
| HNGPJ51 | 4775 | 1 - 594 | 15 - 608 | AC007157. |
| HNGPL91 | 4776 | 1 - 496 | 15 - 510 | |
| HNGPN01 | 4777 | 1 - 531 | 15 - 545 | |
| HNGPN46 | 4778 | 1 - 576 | 15 - 590 | |
| HNGPP61 | 4779 | 1 - 500 | 15 - 514 | AL096791. |
| HNGPR03 | 4780 | 1 - 175 | 15 - 189 | |
| HNGPS10 | 4781 | 1 - 590 | 15 - 604 | AA878407, AA525331, AW381823, T69571, AI912401, AL134167, AA904211, AA657910, AW381816, AW054936, AI671077, AA318492, AA557984, AW392414, AA318209, R70883, H29914, R70884, AA658934, AI923052, R93919, AA279919, AA122307, H43183, AA772704, H67064, AA445908, AI889579, AI198718, AL044339, AA523695, F35902, AI280266, R69527, AA584525, AA070330, AA805573, AA504951, H43771, AA827904, AA804334, AI914713, |

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|---|---|---|---|---|---|
| HNHAB29 | 4782 | 860141 | 1 - 132 | 15 - 146 | AI473671, H01243, AA489390, AA668829, AW389929, AA654482, AA056248, AA228778, AW270429, AL044177, N54538, AI686431, AL035462, AL031123, AC007201, AC005796, AF030453, AC005088, I34294, U52111, Z84487, AC005756, AC004217, AF108459, AC005339, AP000350, AL022156, L47234, AL021546, AL050341, AC003108, AL035457, AC008126, U91321, AC002119, AC009248, AP000011, AC005874, AF134471, AC007240, AL033527, AC004973, AC002418, AC004386, Z84469, AC003109, AC004584, Z95331, AC004990, Z86064, AC006275, AC005775, AC003665, AC007565, M87889, AC006372, AL034420, AL133448, AC004125, AP000694, Z93023, AL050317, AC002059, AC000052, AL022320, AL020993, AC004796, AL049643, Z84466, AL031121, AF196971, AC002546, AL022721, AC004030, AL109620, AC004941, AL035413, AL022165, AL133275, S42653, AF003626, Z84486, AC010169, AL031282, AL034423, Z82205, AF207550, U82671, AC004448, AC005972, AL117340, M57627, AL031721, AL031315, AC003007, AC004022, AC004905, AC006512, AC005632, AC004815, AC005081, U16720, U73169, AC003110, AF024534, AC002314, Z82217, AC003959, AL049575, AC004111, AC007899, AL050307, AC002400, Z82215, AC005912, AC006538, AC002037, AC005328, AC003667, AC006536, AC002352, U52112, U94776, AB017567, AJ131757, AL031284, AC002126, AC004921, AC004531, AC000134, AC005274, AC005332, U37355, U37357, U37452, AC004623, AC007191, AL008726, AL031594, AL030995, AL133304, AC006101, AC005544, AC005988, AC007066, AC005625, Z82244, AC006251, AL035604, AL031848, AC005669, AC005971, AC005067, U95740, AC003690, AC000063, AL031258, AC005790, Z84496, Z97630, AL008637, AL031666, AL096816, AL049712, AC005082, AC004882, U91318, AL031733, AC005529, L78810, AC010170, AL022311, AC006942, AC005372, AC005476, Z82214, Z83846, AL034554, AL022316, AC002492, AC008249, AC003684, AC004991, Z69921, Z84480, AC006515, AC007707, AC006125, Z82208, AL049576, AL008709, AC004814, AP000223, AP000085, AF196970, AL078600, Z94056, AL031120, AC005284, AC002365, AC006064, U63312, AP000128, AP000206, AC006146, AC004835, AC006360, AC022517, AP000245, AC005920, AC006270, AJ239318, E15701, AF015416, AF148213, AB014588, AF102137, AC004801, Z68129, AC002451, AC007766, X96421, L10641, and AL008719. Z98886. |
| HNHAB93 | 4783 | 527921 | 1 - 136 | 15 - 150 | |
| HNHAF77 | 4784 | 527971 | 1 - 123 | 15 - 137 | |
| HNHAG50 | 4785 | 527815 | 1 - 217 | 15 - 231 | |
| HNHAG51 | 4786 | 725898 | 1 - 222 | 15 - 236 | AA974734, AW072398, Z39952, F03162, and AL137476. |
| HNHAG64 | 4787 | 527809 | 1 - 234 | 15 - 248 | |
| HNHAH38 | 4788 | 860118 | 1 - 411 | 15 - 425 | |
| HNHAH84 | 4789 | 527806 | 1 - 274 | 15 - 288 | AA834563, AA707629, and AA465337. |
| HNHAI11 | 4790 | 967668 | 1 - 479 | 15 - 493 | |

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|---|---|---|---|---|---|
| HNHAI15 | 4791 | 860128 | 1 - 115 | 15 - 129 | |
| HNHAI68 | 4792 | 527572 | 1 - 151 | 15 - 165 | |
| HNHAJ59 | 4793 | 703576 | 1 - 404 | 15 - 418 | |
| HNHAK83 | 4794 | 574391 | 1 - 307 | 15 - 321 | |
| HNHAP79 | 4795 | 574384 | 1 - 125 | 15 - 139 | AA835691, AA261783, and AI660058. |
| HNHAW75 | 4796 | 515480 | 1 - 637 | 15 - 651 | AI866487, AL038971, AI631119, AW167374, AI445088, AA904211, AA613624, AI469599, AW301483, AA503019, AA173334, AI017251, AA578832, AA832145, AI719142, AA236867, AI857836, AI281818, AW167330, AA630535, AI362442, AW021583, AF050154, AJ249921, AC005015, Z84466, AL035413, AC005529, AP000692, AL096701, AC005821, AC005527, AL121653, U91326, AC007225, Z98946, AC005225, AC006088, AL035587, AL109984, AC006026, AC006538, AC005933, AC004841, AC007011, AP000694, AC006449, AC007308, AL133246, AC005280, AC005755, Z93023, Z85987, AC007216, AC005089, AL080243, AP000501, AL031311, AL121603, AC007298, AC002470, AL022330, AP000557, AC006441, U91321, AP000510, Z86090, AC006312, AC007664, AC005207, AC007277, AL020993, AC006241, AL035071, AC007546, AC004019, AC004491, AC009516, AC005520, AF001549, AC004032, AC004216, U95739, AC004686, AC004814, AC005300, AC005291, AC005907, Z83844, AL133163, AP000116, AC004858, AF111168, AC007055, AC002350, AC006275, AL035659, AP000555, AC005011, AC004890, AC002126, AC004685, AC005779, AL136295, AC002352, AL031295, AC002398, AL022336, U85195, AC007707, AL109798, Z82214, AC005899, AP000696, AC007199, AC005288, AE000658, AC007537, AL049539, AP000065, AC005088, AC005702, AC002302, AL109628, AL034417, AL049766, AC007731, AL024508, AC006277, AP000553, AL022165, Z99716, AC005914, AC005500, AF053356, AC004534, AC007052, AC006211, L78810, AF038458, AL139054, Y14768, AC005736, AC005618, AC007114, AL133448, AC004876, AL049757, AC004084, AP001053, AC003070, AC004033, AC004000, AF109907, AC006965, AC004796, AC005484, AL021155, AP000505, AL035455, AC000379, AC006544, Z85986, AC004134, AC004963, AC005730, AF129756, AC092404, AC005071, AC005940, U96629, AC007358, AC005081, AC000025, AF134726, AL049872, U91323, AL022326, AC005519, AC007666, AC005081, AC004099, Z97054, AL109758, Z93244, AC005049, AF196969, AL031985, Z82203, AC004832, AC004099, AC002558, AF196779, AL049709, AC005082, AL022311, AL121658, AC004386, AP000030, AC002538, AP000512, AC004922, AC006251, AL117258, AL031584, AC004865, AL031685, AL034423, AL008582, AC005409, AC005037, AC004253, AL132712, AC002544, AC002115, AC006581, AL035086, AL022313, AC007030, AC004805, AL034548, AC005480, AL035683, AL050307, AC006064, AL031662, AC005057, AC003101, AC005531, AL022320, AC005399, AP000251, AL035400, AC005619, AC008044, AC005086, AL024507, AC004883, AL117694, AC007919, AC002045, AC005972, AF107885, AC007688, AC005488, AC002301, AL110502, Z82244, |

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|---|---|---|---|---|---|
| HNHBC30 | 4797 | 693318 | 1 - 250 | 15 - 264 | AL031281, Z84480, AC005694, AP000117, and Z94801. |
| HNHBE19 | 4798 | 724404 | 1 - 349 | 15 - 363 | AA594550. |
| HNHBH62 | 4799 | 574387 | 1 - 308 | 15 - 322 | |
| HNHBH72 | 4800 | 577334 | 1 - 386 | 15 - 400 | AC004520. |
| HNHBK22 | 4801 | 574305 | 1 - 259 | 15 - 273 | AA758873, AC004770, and AL117582. |
| HNHBK59 | 4802 | 959771 | 1 - 292 | 15 - 306 | |
| HNHBK80 | 4803 | 721688 | 1 - 227 | 15 - 241 | |
| HNHBM63 | 4804 | 574310 | 1 - 290 | 15 - 304 | |
| HNHBM66 | 4805 | 860119 | 1 - 361 | 15 - 375 | |
| HNHBO20 | 4806 | 793416 | 1 - 652 | 15 - 666 | Z65368. |
| HNHBO71 | 4807 | 868059 | 1 - 310 | 15 - 324 | |
| HNHBO83 | 4808 | 526746 | 1 - 223 | 15 - 237 | |
| HNHBQ53 | 4809 | 574090 | 1 - 162 | 15 - 176 | AC003954. |
| HNHBS07 | 4810 | 953850 | 1 - 411 | 15 - 425 | |
| HNHBS23 | 4811 | 574048 | 1 - 314 | 15 - 328 | |
| HNHBS38 | 4812 | 925693 | 1 - 956 | 15 - 970 | |
| HNHBU20 | 4813 | 669866 | 1 - 243 | 15 - 257 | |
| HNHBU21 | 4814 | 574030 | 1 - 350 | 15 - 364 | |
| HNHBU37 | 4815 | 574139 | 1 - 326 | 15 - 340 | |
| HNHBU79 | 4816 | 597123 | 1 - 255 | 15 - 269 | AC005067. |
| HNHBU82 | 4817 | 577193 | 1 - 382 | 15 - 396 | AW005603, AA504818, AW021007, AA632556, AI054090, AI246061, AA135988, AA714073, AI678476, AA244181, AI591134, AW079667, AI343669, AI309121, T55707, AI445373, T07225, AA878407, N66927, N69399, AI049701, AA493447, AA632765, AI471467, AI185394, F18761, AA135811, AI431513, AI439676, H79586, AI869786, AA657910, AI300413, AI342786, AA995373, AI869797, AA713705, AI284543, AA599749, AI762302, R83068, AI254770, AA297961, AI251944, AI251034, AI251203, AI251284, AI800706, AA613162, H93717, AI635196, H42893, F31811, AW007424, AI884861, AI250552, AW303098, H43183, AA527109, AA845825, AA678616, AI223968, N52293, AA610255, AA804729, AI049504, AI302277, AI561210, AA569734, AI499941, AI002762, AA325250, AI915081, AI564301, AA376896, AI251024, AI143653, AI520967, AI249853, AA595656, R71796, AI628859, AA744048, AW019964, AA358337, AL137946, AI376197, AI567941, AA778962, AA226770, AA083681, AA594227, H86579, AA632839, AA083839, AA053463, AA568425, AI609574, AA565911, AA744428, AI539822, AI300818, AI310992, AA856866, H52472, AI653783, F08214, W78056, R80563, AA569597, AI733647, AI733662, AA743976, R35259, AI453160, AA449979, Z96216, L78442, AL078621, AC005015, AL022311, AC004887, AC006516, AC008101, AC008079, |

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| HNHBU91 | 4818 | 765815 | 1 - 220 | 15 - 234 | AL132985, M87889, AP000228, AP000140, AC007314, AP000088, AC005669, AC004149, AL078581, U78027, U91320, AC004148, AL022323, AL035422, AC019014, AL049779, AL079305, AC002368, ZR4497, AC004150, AL049176, AF207550, AC007684, AB022785, AL049631, AC006360, AL033381, AC005157, AC006947, AC005244, AI078583, Z97205, AC004785, AC004645, AL031003, AC006111, AL049766, AC006251, AL022240, AL021155, AC007376, AC005392, AP000065, AC002559, AL050337, Z96074, AL031846, X81637, AC002319, AP000157, AC004836, AC004702, AC004686, AP000014, AL096701, Z92979, AC002549, AC006540, AC005574, AL096774, AF190465, AL008635, AC007263, AC003037, AL031733, I34294, AF060911, AC004651, AC002128, AF108083, AC003109, U95742, Z82215, AC002351, AC005486, AC007226, AL121652, U02051, AC002045, AC005933, Z75407, AF051976, AL049552, AC002310, Z93241, Z98941, AC004883, AF064861, AC002430, AL020995, AC007384, AF006752, AC004901, AL035407, AL035464, AC004884, AC006996, AC005245, AC002492, AC006127, AC005221, AC005480, AL031666, AC002477, AC004477, Z92542, AL122020, AL021917, AL096818, AC000093, D88268, AL121825, AC005017, AC007350, AL133353, AC004216, AF064858, U66536, Z68754, AC005932, AC004528, AC004815, AF196972, AL031670, AC004033, AC005030, AC005040, AC005500, AC007075, Z73964, AF165141, AC002117, AC006030, AC007880, U91327, Z82203, AC007193, AC003009, AC005184, AC005534, AC005011, AC003035, AC005553, AF111167, X95887, AC005625, AP000326, AC003100, AP000122, AP000054, AP000169, AC004466, AC003957, Z83844, AC007308, AC006515, AC002470, AC005411, L78833, AC004232, AC002316, AC006062, AL031295, AC005587, AC005332, AC005046, L81693, Y11107, AC002106, AL022302, AL031255, AC003678, AC005755, AL049565, Z84486, AC004938, AC008149, AL049713, AC004522, AL035443, Z95325, AL034423, AC005609, AC005921, AC007371, AC007216, U52112, AC004083, AC005229, Z98304, AF049895, AC004823, AF144755, AF024533, AC004778, AC004750, AP000256, AC000035, AC005568, AL031007, Z93783, AC004752, AL109956, AL121838, AP000098, AC005049, AL008583, AL021707, AC000025, AC004104, AC006006, AC005509, AP001052, AC005527, AC006213, AC002070, AC007051, AC007731, Z99716, AC005529, Z68192, AL049793, Z69715, and AC004694. |
| HNHBU92 | 4819 | 753550 | 1 - 320 | 15 - 334 | |
| HNHBU93 | 4820 | 757745 | 1 - 404 | 15 - 418 | |
| HNHBV55 | 4821 | 574026 | 1 - 236 | 15 - 250 | |
| HNHBY06 | 4822 | 936012 | 1 - 356 | 15 - 370 | AI732313, AI732289, R48562, R69392, AA598605, AI283938, T48780, AA525331, AA302978, AI039257, AA857812, AA809089, AA468975, AA351427, AA862075, AA225273, AA156323, AI473671, AI537020, AA481887, AA828844, AA613761, AA551105, AA570238, AA904211, AI719298, AA878492, H90114, T07327, F00688, AI984118, AA368616, AA602477, AA502991, AI064786, AA135988, AA491767, R06030, AA612727, AA493789, AA829036, AI066711, |

AA804995, AA085410, R98002, H49253, AA523605, R97239, T94072, AA128941, F29968,
AA578621, AI246080, AA364082, AI679871, AA778962, AI886736, AA303054, T58440,
H95865, AI246996, AI679294, AA021189, AA452325, AW328446, AI277373, AA847499,
AI278440, AA378474, AI332615, AA742818, AI742168, AA349606, AA496724, AI309943,
T07903, AA021429, AA018588, AA021428, AA054055, M78032, AA086042, AA587835,
AA661583, T05684, AA342626, W01323, AA458573, AA721572, AA019872, N26230,
AA397821, AA135811, AA714011, AW023111, AI653783, AI590926, AA765925, AA599423,
AL034555, AC007055, I34294, AL078600, AC007227, AC005300, AC005082, AF205588,
AC004859, AC007536, AC005778, AC005914, AC000134, AL022313, AP000010, AL109827,
AB015355, AL080243, AC004253, AC007193, AL031291, Z15025, AC005913, AC005588,
AL031283, AL035086, AC008372, AJ246003, Z98884, AC004896, AL117337, L05367,
AC005736, AL109984, AC006166, AL022323, AC002350, AC006479, AP000032, AC004876,
AC006538, AC006312, AC007056, AL117338, AC006449, AC005089, AL049780, AC004129,
AL022238, AC005037, AL121658, AC002477, AC006251, AL136501, AL121653, AC007842,
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AC005200, AC004841, AL008729, U47924, AP000313, AC006084, AL024498, AC002470,
AF045555, AP000194, AC004820, AP001052, AL132712, AC005971, AC006213, AC004983,
AP000493, AL022318, AC005254, Z95115, Z75407, AC004520, AB023051, AC004973,
AC004905, AC006001, AC003684, AL133163, AL049575, AC005015, U52111, AP000226,
AP000350, AP000356, AC004890, AP000050, AC005261, AC000024, AL049694, AL096702,
AC005317, AC006115, D87011, AC016830, AC006000, AC005484, AC005562, AF038458,
AC004967, AP000144, AL049874, AP000087, AC005332, AL031133, AC002565, AC005527,
AL031622, Z84476, AC004231, AC005316, AL022324, AP000505, AC004814, AC008101,
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AC005821, AC005529, AC002531, AF196970, AC006515, AC006237, AL031432, AC004815,
AC004753, AL109967, AC004491, AL034420, AL109758, AC006271, AC009542, AC007544,
AL049712, AC005369, AC007540, AC007225, Z99716, AC002425, AF001549, AC003007,
AC005099, AL021707, AF129756, D87009, Z97054, Z99943, AL049198, AF111167, AL035398,
AC007792, AL121595, AL133382, AC005531, AL031230, AL021808, AC005632, AC007546,
Z84486, AC005088, AL132987, AL049776, AC004228, AF030453, AC005542, AP000513,
AP000695, Z94056, X55448, X54486, AL034548, AC004548, AC004927, AP001065, Z95331, AC006012,
AC005786, AC003101, AC004832, AF146191, AL034375, AC005789, AF069489, AP000553,
AP000512, AL050318, Z68276, AL139054, AF207550, AC007314, AF104455, AC010200,
AC002074, Z98950, AL109854, AC006581, AC002310, M55987, AL031655, AF109907,
AC004955, AC004805, Z97055, AC004526, AC008079, AL049643, AC005901, AP000104,
AI229043, AL021453, AC003035, AL031427, AC005004, AC005004, AC002094, Z75744, AC009516,
AC006211, AL031622, AC005072, AC002126, AC004663, AC005189, AC005399, AP000167, AP000052,

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| HNHBY45 | 4823 | 1 - 377 | 15 - 391 | AC006262, AF165926, AC004821, and AL022336. |
| HNHBY60 | 4824 | 1 - 218 | 15 - 232 | AL031654. |
| HNHBY83 | 4825 | 1 - 478 | 15 - 492 | AC004258. |
| HNHBZ03 | 4826 | 1 - 387 | 15 - 401 | |
| HNHCC42 | 4827 | 1 - 345 | 15 - 359 | |
| HNHCD63 | 4828 | 1 - 384 | 15 - 398 | AC007758. |
| HNHCE68 | 4829 | 1 - 425 | 15 - 439 | |
| HNHCJ25 | 4830 | 1 - 407 | 15 - 421 | |
| HNHCJ35 | 4831 | 1 - 409 | 15 - 423 | |
| HNHCJ39 | 4832 | 1 - 117 | 15 - 131 | AC005390. |
| HNHCJ68 | 4833 | 1 - 237 | 15 - 251 | |
| HNHCJ71 | 4834 | 1 - 225 | 15 - 239 | |
| HNHCJ80 | 4835 | 1 - 485 | 15 - 499 | AA135377, AI016828, AA572714, Z77249, AC005899, AL022336, Z96074, AC004841, AF111168, AL049780, AL035249, AF048728, AL080317, AC004605, AC009721, AC005033, AC005067, AL049776, AC004797, AF205588, AP000300, AC008372, AC009509, AL031733, AP000045, AP000113, AC004593, AL031276, AC010205, AC005409, AC005619, AL139054, AL034423, AC005015, AC016831, AL035415, AC005081, AL031577, AC004659, AC004589, AL022400, AC004983, AB022785, AP000065, AC004925, AC005740, AC004895, AF017104, AC006063, AL009181, AC004923, AC005355, AL022326, AP000512, AC004707, AC001226, AC003663, Z98200, AC005058, AL049872, L78833, and AL096701. |
| HNHCL20 | 4836 | 1 - 420 | 15 - 434 | AA362218. |
| HNHCL38 | 4837 | 1 - 211 | 15 - 225 | |
| HNHCL47 | 4838 | 1 - 264 | 15 - 278 | |
| HNHCM80 | 4839 | 1 - 279 | 15 - 293 | |
| HNHCN70 | 4840 | 1 - 187 | 15 - 201 | AC009405. |
| HNHCO27 | 4841 | 1 - 205 | 15 - 219 | |
| HNHCO48 | 4842 | 1 - 425 | 15 - 439 | |
| HNHCO64 | 4843 | 1 - 392 | 15 - 406 | AC007559. |
| HNHCP18 | 4844 | 1 - 196 | 15 - 210 | AP000350. |
| HNHCP22 | 4845 | 1 - 573 | 15 - 587 | |
| HNHCP37 | 4846 | 1 - 361 | 15 - 375 | AW419246, and AW277087. |
| HNHCP78 | 4847 | 1 - 312 | 15 - 326 | |
| HNHCP88 | 4848 | 1 - 228 | 15 - 242 | |
| HNHCQ70 | 4849 | 1 - 431 | 15 - 445 | R69234, H70121, and AC005071. |
| HNHCU18 | 4850 | 1 - 118 | 15 - 132 | |

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| HNHCU42 | 4851 | 850918 | 1 - 664 | 15 - 678 | AI539360, AC003007, and AC005632. |
| HNHCU57 | 4852 | 735005 | 1 - 226 | 15 - 240 | |
| HNHCV72 | 4853 | 766213 | 1 - 387 | 15 - 401 | R38821, and AF070579. |
| HN1CZ07 | 4854 | 953881 | 1 - 321 | 15 - 335 | |
| HNHCZ23 | 4855 | 574325 | 1 - 318 | 15 - 332 | AI366208, AC002041, AC002038, AC006352, and AJ239321. |
| HNHDA07 | 4856 | 855988 | 1 - 443 | 15 - 457 | |
| HNHDA79 | 4857 | 574350 | 1 - 140 | 15 - 154 | |
| HNHDA88 | 4858 | 574150 | 1 - 147 | 15 - 161 | |
| HNHDB11 | 4859 | 574323 | 1 - 488 | 15 - 502 | |
| HNHDB23 | 4860 | 676290 | 1 - 488 | 15 - 502 | |
| HNHDB46 | 4861 | 574329 | 1 - 488 | 15 - 502 | |
| HNHDB93 | 4862 | 800661 | 1 - 60 | 15 - 74 | |
| HNHDC26 | 4863 | 574304 | 1 - 341 | 15 - 355 | |
| HNHDC47 | 4864 | 708705 | 1 - 329 | 15 - 343 | |
| HNHDC83 | 4865 | 577339 | 1 - 421 | 15 - 435 | |
| HNHDC95 | 4866 | 734794 | 1 - 196 | 15 - 210 | |
| HNHDE38 | 4867 | 709277 | 1 - 334 | 15 - 348 | R67093, AW316599, AL121287, AI313157, AA807556, AA188940, R91931, AA491440, AI453160, AI564294, AA683069, AA632765, AW081324, AI471467, AL041895, AA614595, AA564682, AA469441, AA314338, AW007424, AA366847, AW028834, AI891075, AW058223, AJ011930, AJ003147, AL022724, AL096761, AC002477, AL031592, AL049539, AC002357, AL024498, AC005599, AC005082, Z96776, AC003108, AL096766, Z84469, AL020997, AP000555, AL031311, AC002418, AC007993, Z83843, AC004386, AC005778, AL109952, AC004770, AC005015, AC005625, AC012039, AC006293, AB003151, AP000688, AC005245, AC005777, AL034582, AP000502, AC002394, AF019413, AL049557, AL133448, AF134726, Z69721, AC000069, AC002314, AC000095, AC007326, AC005726, AL133445, AC006449, AC004031, AC006071, AC005998, AC005484, AC005005, AC005288, AC005514, Z82243, AJ239325, AC004834, AL008583, AC003982, AL121603, AC004882, AC005081, AC005529, AC004131, AB017602, AC004883, and AC000025. |
| HNHDF31 | 4868 | 968249 | 1 - 223 | 15 - 237 | AC006560. |
| HNHDF48 | 4869 | 574385 | 1 - 200 | 15 - 214 | |
| HNHDH06 | 4870 | 936046 | 1 - 327 | 15 - 341 | |
| HNHDH60 | 4871 | 860101 | 1 - 314 | 15 - 328 | |
| HNHDL62 | 4872 | 577701 | 1 - 213 | 15 - 227 | |
| HNHDL90 | 4873 | 789082 | 1 - 466 | 15 - 480 | |
| HNHDL94 | 4874 | 773592 | 1 - 312 | 15 - 326 | |
| HNHDM03 | 4875 | 924713 | 1 - 389 | 15 - 403 | |

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| HNHDM40 | 4876 | 711352 | 1 - 341 | 15 - 355 | AC007052. |
| HNHDM50 | 4877 | 724550 | 1 - 539 | 15 - 553 | H41308, N94134, H37815, H51061, H69577, U47924, AL049872, AP000121, AF111169, AC005332, U63721, AL031681, AC005839, AP000321, AL022165, AC005280, AC005412, AC002310, AC005488, AC005736, AC004895, AC005015, AC005180, AF001549, AC006120, AC006965, AC004983, M15958, AC007151, AC004797, AC005081, Z99716, AC002470, AL133245, AP000167, AP000052, Z93241, AL023553, AC004998, AC004686, AC007312, AC006088, Z93017, AL049776, AC004815, AC004923, AP000113, AC006211, AC003109, AC003108, AC004596, AL139054, and AC002519. |
| HNHDM74 | 4878 | 506621 | 1 - 423 | 15 - 437 | |
| HNHDN27 | 4879 | 573388 | 1 - 188 | 15 - 202 | |
| HNHDN79 | 4880 | 735007 | 1 - 304 | 15 - 318 | |
| HNHDP04 | 4881 | 859988 | 1 - 738 | 15 - 752 | AI143917, E04378, D10017, AF023669, AB032964, E04379, and E04380. |
| HNHDP29 | 4882 | 746093 | 1 - 340 | 15 - 354 | |
| HNHDQ11 | 4883 | 967334 | 1 - 482 | 15 - 496 | |
| HNHDQ17 | 4884 | 573328 | 1 - 347 | 15 - 361 | |
| HNHDQ35 | 4885 | 707334 | 1 - 325 | 15 - 339 | |
| HNHDQ39 | 4886 | 704560 | 1 - 147 | 15 - 161 | |
| HNHDQ56 | 4887 | 577256 | 1 - 494 | 15 - 508 | R53975, AC005226, AC004690, AC004814, and AL031132. |
| HNHDQ65 | 4888 | 573357 | 1 - 337 | 15 - 351 | |
| HNHDQ71 | 4889 | 496246 | 1 - 570 | 15 - 584 | |
| HNHDQ93 | 4890 | 923817 | 1 - 416 | 15 - 430 | |
| HNHDR10 | 4891 | 968082 | 1 - 367 | 15 - 381 | AI053568, AA570255, AW069227, AW161879, T05834, AC007276, AP000355, AP000356, AL049795, U91326, AC005071, AL024507, AL035447, AC005081, U91323, AC007637, AL022476, AC004167, AC004491, AL031311, AC002563, AC005480, Z75407, AL008582, AC002425, AC004821, U91318, AC004099, AC005089, AF111168, AL024498, AC002073, AC005500, AC007192, AC002094, AP000512, U78027, AC005412, AC000379, AC005067, AC005212, AC007216, AL022165, AL021918, AL031432, AI035249, AC005736, AC007387, AC005520, AC007842, AC007421, AC007225, AL133163, AL132712, AL031587, AC002472, AC005971, AC005193, AB003151, AC004765, AC005015, AF030453, AC008018, AC005821, AL031255, AC005696, AL049589, AC005180, U25956, AC005088, AL133312, AL031680, AC006480, AC004125, AC007664, U95740, AF165926, AC008101, AC005011, U52111, AC005523, AC006449, AC004487, AC004143, AL049843, AP000557, AC005189, AC005730, AC006581, AC007566, AC006487, AC004033, AL050338, AF001550, AC000134, AC005094, AC005280, AC005261, AC005274, AC004033, AL050338, AF001550, AC005839, AL121603, AF069074, AC002126, AL133243, AP000116, Z98044, AC005488, AL031683, AL031685, AF053356, AL133246, AL022316, AC005338, AC005722, AL031295, AL022318, AC006251, AC004019, |

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| HNHDR28 | 4892 | 685580 | 1-410 | 15-424 | AC004663, AC006277, AF196779, AL034549, AL008730, AL049776, AC004801, AC004859, D84394, AL049872, AL022311, AP000689, AC002369, AP000113, AP000045, AP000555, AC004882, AP000509, Z93930, AL096703, AL117694, Z95114, AC006130, AC005914, AC004991, AC007279, AC006241, AC009247, AL049539, AL022313, AC004662, AC003109, AC002350, AC005568, AC004815, AC07193, AL096773, AC002470, AC007292, Z83844, AC004983, AL139054, AC004893, AC009308, AC009464, U73479, AC012039, AL023553, AC006441, and AC010170. |
| HNHDR71 | 4893 | 575480 | 1-451 | 15-465 | AW086034. |
| IINHDS27 | 4894 | 683585 | 1-246 | 15-260 | |
| HNHDS83 | 4895 | 573347 | 1-200 | 15-214 | |
| HNHDS88 | 4896 | 573349 | 1-334 | 15-348 | |
| HNHDT01 | 4897 | 917004 | 1-369 | 15-383 | |
| HNHDT28 | 4898 | 887158 | 1-447 | 15-461 | AA311373, AA318324, AI623755, AW263181, AI979227, AA423972, AW193871, AL048971, AP000528, AP000529, and AC004527. |
| HNHDT42 | 4899 | 574455 | 1-245 | 15-259 | |
| HNHDT54 | 4900 | 728871 | 1-482 | 15-496 | |
| HNHDU83 | 4901 | 717796 | 1-428 | 15-442 | |
| HNHDV50 | 4902 | 506622 | 1-275 | 15-289 | |
| HNHDV84 | 4903 | 750262 | 1-372 | 15-386 | |
| HNHDW78 | 4904 | 723189 | 1-271 | 15-285 | |
| HNHDX80 | 4905 | 779334 | 1-329 | 15-343 | |
| HNHDX84 | 4906 | 615272 | 1-230 | 15-244 | |
| HNHDY18 | 4907 | 573329 | 1-367 | 15-381 | |
| HNHDY37 | 4908 | 582473 | 1-187 | 15-201 | AI809475. |
| HNHDY45 | 4909 | 576776 | 1-320 | 15-334 | AA320060, AA581317, AA488419, W96277, AA554958, AA020873, AI923052, AI207534, Z84484, AC004912, AC005015, AC004813, AL009181, AC005914, AC024507, AL022312, AL023876, AL096775, AC021126, AC004408, AC005207, AL132987, AC066450, AC066576, AC004070, AL034423, AP000036, AL050306, AC002412, AP000099, AC006121, AL132796, AC008012, AC008372, AC007563, AC004034, AP000353, AC004890, AC004031, AC004656, AP000466, AP000322, AP000168, AP000053, AP000211, Z97989, AC004910, AC007938, AL117355, AL035460, AC006277, AC002077, AC004763, AC005899, AC004585, AP000121, AC003029, AC006581, AC002511, AP000563, and AC002546. |
| HNHDY50 | 4910 | 924211 | 1-163 | 15-177 | |
| HNHDY54 | 4911 | 945708 | 1-581 | 15-595 | |
| HNHDY83 | 4912 | 795954 | 1-243 | 15-257 | AL031274, Z98941, AC010582, and AL121576. |

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| HNHDZ14 | 4913 | 506738 | 1-312 | 15-326 | AL033525. |
| HNHDZ26 | 4914 | 419716 | 1-418 | 15-432 | AW024707. |
| HNHDZ69 | 4915 | 573346 | 1-236 | 15-250 | |
| HNHEA06 | 4916 | 835893 | 1-340 | 15-354 | E04378, and D10017. |
| HNHEA21 | 4917 | 574868 | 1-229 | 15-243 | |
| HNHEA40 | 4918 | 573327 | 1-273 | 15-287 | |
| HNHEA96 | 4919 | 796491 | 1-330 | 15-344 | AA322484, AA501575, and AA339577. |
| HNHEB47 | 4920 | 573339 | 1-185 | 15-199 | |
| HNHEB88 | 4921 | 412655 | 1-128 | 15-142 | |
| HNHEC40 | 4922 | 576507 | 1-347 | 15-361 | |
| HNHEC51 | 4923 | 577306 | 1-406 | 15-420 | |
| HNHEC96 | 4924 | 796463 | 1-356 | 15-370 | |
| HNHED02 | 4925 | 920414 | 1-394 | 15-408 | |
| HNHED51 | 4926 | 682992 | 1-673 | 15-687 | |
| HNHED82 | 4927 | 576541 | 1-410 | 15-424 | Z82249. |
| HNHED83 | 4928 | 576540 | 1-317 | 15-331 | |
| HNHEE25 | 4929 | 576512 | 1-371 | 15-385 | AI636627, AC004916, AC007878, AL008987, AL023799, AL080317, AP000959, AF064866, AC006965, AL096707, AC006441, AL035443, AC004687, AC006948, AL021329, AL022163, AF001905, AC005053, AC006324, AC007748, AC005826, AC007182, AC002476, AC005844, AC008170, AC003983, AC006368, and AF043945. |
| HNHEE30 | 4930 | 576440 | 1-425 | 15-439 | |
| HNHEE38 | 4931 | 860073 | 1-227 | 15-241 | |
| HNHEE40 | 4932 | 576442 | 1-423 | 15-437 | AF130343. |
| HNHEE49 | 4933 | 576820 | 1-396 | 15-410 | |
| HNHEF01 | 4934 | 916792 | 1-336 | 15-350 | AL031447. |
| HNHEF73 | 4935 | 576419 | 1-261 | 15-275 | |
| HNHEG28 | 4936 | 586443 | 1-322 | 15-336 | |
| HNHEG32 | 4937 | 576426 | 1-420 | 15-434 | |
| HNHEG49 | 4938 | 576415 | 1-372 | 15-386 | |
| HNHEG68 | 4939 | 861181 | 1-286 | 15-300 | |
| HNHEG91 | 4940 | 506278 | 1-346 | 15-360 | |
| HNHEH04 | 4941 | 582732 | 1-329 | 15-343 | |
| HNHEH37 | 4942 | 490514 | 1-495 | 15-509 | |
| HNHEH41 | 4943 | 578589 | 1-298 | 15-312 | AA357626. |
| HNHEH51 | 4944 | 678114 | 1-438 | 15-452 | |
| HNHEH52 | 4945 | 860021 | 1-398 | 15-412 | N57205, AI312090, AI312784, AC006511, AC003982, AL021391, and |

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| HNHEH60 | 4946 | 576517 | 1 - 391 | 15 - 405 | AL031003. |
| HNHEI06 | 4947 | 923080 | 1 - 363 | 15 - 377 | |
| HNHEI64 | 4948 | 576549 | 1 - 315 | 15 - 329 | |
| HNHEJ07 | 4949 | 953586 | 1 - 427 | 15 - 441 | AA115161, AL121825, and AP000547. |
| HNHEJ11 | 4950 | 967265 | 1 - 731 | 15 - 745 | |
| HNHEJ23 | 4951 | 576533 | 1 - 364 | 15 - 378 | |
| HNHEJ24 | 4952 | 916556 | 1 - 221 | 15 - 235 | |
| HNHEJ44 | 4953 | 716723 | 1 - 303 | 15 - 317 | AC006464. |
| HNHEJ57 | 4954 | 576535 | 1 - 234 | 15 - 248 | |
| HNHEJ85 | 4955 | 964882 | 1 - 149 | 15 - 163 | |
| HNHEK01 | 4956 | 916790 | 1 - 452 | 15 - 466 | |
| HNHEK63 | 4957 | 576819 | 1 - 453 | 15 - 467 | AJ009794. |
| HNHEK79 | 4958 | 954548 | 1 - 319 | 15 - 333 | |
| HNHEK83 | 4959 | 576420 | 1 - 325 | 15 - 339 | |
| HNHEL09 | 4960 | 576418 | 1 - 309 | 15 - 323 | AJ223321. |
| HNHEL37 | 4961 | 713723 | 1 - 587 | 15 - 601 | AI312582, AI054244, AA491864, AW275432, AI683131, AA715814, AW338651, AI569401, AI278972, AA533054, F30650, AI270646, AA533880, AA526625, AA526326, AI590442, AI620668, AI821805, AI880329, AA552590, AL037632, AL042230, AC005193, AC005049, AL080243, AC005519, U91318, AC004882, AC005829, AC004802, AL031597, AC004675, AF083655, AC004212, AF088219, AC007546, AC002350, AC004150, AC005484, AL035495, AC004983, AC008044, AC004024, AC005212, Y18000, AL078460, AL050307, AC005903, AC007384, AL109753, AC006480, AL021877, AC006544, AC000039, AL021808, AC006014, AC004796, AC002045, AC002369, AL031846, AL096791, AL033527, AC005529, AC005768, AC004967, AL022326, AC004662, AL133163, AP000512, AC005046, AL031670, AF031078, AL031432, AC004678, AF111168, AC004993, AC002126, AB023049, Z85986, AC000367, AF030876, AC007226, AC004084, AC004491, Z82203, AC004448, AC007774, Z93023, AC005488, AC005409, AF011920, Z82176, U95090, AC006120, Z97053, AL136504, AC002430, AC005409, AC006538, AC006211, AC006958, AC005088, AC002091, AC007537, AC004777, AL035450, AL031311, AC008134, AF134726, AL049869, AI022165, AC005015, AP000347, AL022320, AC007676, AC005086, AC004019, AL078593, AC005702, AF190465, AL049776, AL049872, AL135960, AJ131016, AC007308, AC006079, AC006115, AC010205, AC004859, AL021391, AP000432, AD000812, AL009181, AL022328, AF207550, AC003029, AC006160, L48038, AL031803, AL117694, AC004841, AL132992, AC002565, AL021394, AF196779, AC005755, AC004913, Z97054, AC004526, AC007057, AL050308, AL050332, AP000556, AF185589, AL133371, AL023807, AC005412, AL109627, AC005235, AC005562, |

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| HNHEL42 | 4962 | 859830 | 1-448 | 15-462 | AC007192, AC003108, AC007182, AP000501, AC006084, Z68282, AC002312, AL031773, AC006511, AF053356, AC005387, L44140, AC006121, AC005358, AC004813, L78810, AC005095, AL031733, AC007151, AC007225, AC005773, AC005822, AL031685, AC006323, AL020993, AF165926, AC005480, Z81370, AC009363, AC000025, AL031282, AL022302, AC004000, AC000353, AC006344, AF001548, AP000346, AC006111, AC005377, Z98750, AL035588, AL034379, AL022721, AC006033, AC004854, U91326, AL049761, AC005229, AF159056, AC005921, AC005821, AC005922, AC005695, AC005520, AP000065, AL035458, AC000120, AP000356, Z79997, AL049839, AC005209, AC004805, AC006581, AC002314, AC004148, AC007279, AC005527, AL121653, AL034417, AC004929, AC002476, and AC007637. |
| HNHEL44 | 4963 | 576423 | 1-254 | 15-268 | |
| HNHEL53 | 4964 | 506281 | 1-360 | 15-374 | |
| HNHEL82 | 4965 | 576430 | 1-579 | 15-593 | |
| HNHEL94 | 4966 | 786930 | 1-410 | 15-424 | AA761183, AA806545, AA651905, AA811074, AA836161, AW341564, AW404901, AI393457, AW292488, AI671881, AA741473, AA281261, and AA994866. |
| HNHEM04 | 4967 | 950725 | 1-350 | 15-364 | |
| HNHEM34 | 4968 | 860047 | 1-343 | 15-357 | |
| HNHEM35 | 4969 | 576424 | 1-339 | 15-353 | |
| HNHEM83 | 4970 | 825354 | 1-594 | 15-608 | AL040165, T59913, AF109718, AC004916, and AC004987. |
| HNHEM85 | 4971 | 783480 | 1-332 | 15-346 | AL031668. |
| HNHEN02 | 4972 | 920420 | 1-420 | 15-434 | |
| HNHEN16 | 4973 | 615402 | 1-420 | 15-434 | Z82975, and AC007102. |
| HNHEN56 | 4974 | 733521 | 1-432 | 15-446 | N25067, AI741934, R93919, AA854983, AA065087, AA159978, and AF196971. |
| HNHEN66 | 4975 | 576544 | 1-432 | 15-446 | |
| HNHEN76 | 4976 | 576542 | 1-437 | 15-451 | |
| HNHEO29 | 4977 | 576548 | 1-427 | 15-441 | |
| HNHEO43 | 4978 | 860046 | 1-690 | 15-704 | |
| HNHEO83 | 4979 | 706683 | 1-196 | 15-210 | |
| HNHEO84 | 4980 | 859992 | 1-420 | 15-434 | T62624, AA018757, AA457771, AL043721, AI198376, AI471572, AW072923, AA482810, R83097, AL133163, AC005971, AC005288, AC006079, AL050309, U96629, AL031311, AC004814, AL022238, AC005899, AC005614, AC005011, AP000215, AC007546, AC004019, AC004150, AC005251, AC004257, AC007666, AC005602, AC002544, U91326, AF196779, AL050332, AC004596, AP000350, AC003662, Z95331, D84394, AC005412, AC005034, AC006241, AC004895, AL121653, Z82215, AC005703, AC012627, AC006449, AC004253, Z85987, AC007934, AC006312, AL080243, AC005823, Z85986, |

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| HNHEP49 | 4981 | 1 - 326 | 15 - 340 | AC006379, Z83844, AC005858, AL049636, AP000555, AC007565, Z21688, AC007011, and AL050333. |
| HNHEQ07 | 4982 | 1 - 438 | 15 - 452 | AF109076. |
| HNHEQ46 | 4983 | 1 - 297 | 15 - 311 | |
| HNHEQ60 | 4984 | 1 - 226 | 15 - 240 | |
| HNHEQ70 | 4985 | 1 - 423 | 15 - 437 | |
| HNHEQ92 | 4986 | 1 - 349 | 15 - 363 | AL031290. |
| HNHEQ94 | 4987 | 1 - 236 | 15 - 250 | |
| HNHER06 | 4988 | 1 - 272 | 15 - 286 | AC004036. |
| HNHER21 | 4989 | 1 - 517 | 15 - 531 | |
| HNHES05 | 4990 | 1 - 312 | 15 - 326 | |
| HNHES06 | 4991 | 1 - 278 | 15 - 292 | |
| HNHES07 | 4992 | 1 - 381 | 15 - 395 | |
| HNHES11 | 4993 | 1 - 383 | 15 - 397 | |
| HNHES23 | 4994 | 1 - 475 | 15 - 489 | AA215634, AA825300, AA491266, AW136478, and AA282054. |
| HNHES35 | 4995 | 1 - 387 | 15 - 401 | AW249240, and AC006261. |
| HNHES56 | 4996 | 1 - 381 | 15 - 395 | |
| HNHES61 | 4997 | 1 - 493 | 15 - 507 | AA093346, AI261785, AA714323, AC005498, AP000457, AL049641, AC005064, AL109764, AL049710, AC000119, AL049565, AC005019, AC004454, AL050401, AL049834, U66059, AC004842, AL035695, AC004741, AF101874, AC004908, AL132777, AL133312, AL049778, Z71182, AL135879, AL121790, AC007239, AL023806, AC004948, AL031663, AC004949, Z70227, AC005873, AB020861, AL021451, AC005199, AL031114, U01882, AC007444, and AC005502. |
| HNHES81 | 4998 | 1 - 370 | 15 - 384 | AJ011414, AJ011415, X87904, and AB007867. |
| HNHET11 | 4999 | 1 - 388 | 15 - 402 | |
| HNHET17 | 5000 | 1 - 430 | 15 - 444 | |
| HNHET24 | 5001 | 1 - 368 | 15 - 382 | |
| HNHET25 | 5002 | 1 - 373 | 15 - 387 | |
| HNHET57 | 5003 | 1 - 445 | 15 - 459 | T57118, AC004966, AC007544, and AC007253. |
| HNHEU50 | 5004 | 1 - 342 | 15 - 356 | AA758275, H52638, AI445536, AA601208, AA354868, AW151201, AA209436, AI628200, AI628178, AA557911, T41164, T41132, AI745473, AA491361, AA311060, AW103782, AA569053, H40478, F23268, AA708305, AI859742, AI452836, H48734, M62264, AI459798, AC005231, AC005899, D87675, U85195, AC007221, AC006312, AC005049, AC005954, AC005736, AC005529, AL009181, AF134726, AL031589, AC005531, AC006120, AC007993, AL022336, AC016830, AP000255, AL033381, AL139054, AC005971, AP000135, AL024498, |

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| HNHEU60 | 5005 | 1 - 328 | 15 - 342 | AC006530, AB017602, AC016027, AP000031, AL031387, AC004509, AL021939, AP000008, AC003962, AL080243, AP000704, AC006125, AC005206, AC006571, AC006121, AC004185, AL109628, AL049776, AC005988, AC007227, AP000117, AC002558, AC007899, AC005667, AL096775, AC005837, AF141309, AC005399, AC007676, Z99716, AF030453, AP000090, U82668, AC004882, Z83822, AC005520, AC005071, AC005829, AF006752, AL133448, AF031076, AC005932, AC005697, AL035659, AC005356, AC003101, AC004841, AC004526, AR036572, U91328, AC007057, AC008126, AC007738, AF196971, AP000044, AP000112, AL022318, AC004686, AP000503, AC004966, AC006088, AL121653, Z84721, AC020663, AL035410, AL021878, Z82184, AC007204, Z83826, AP000502, AP000213, AC007387, AC005245, AF207550, AC002310, Z95115, AC007546, AC006132, AC005914, AL031680, AC007041, AC002302, AC005519, AC005696, AL049553, AF208500, AL049759, AC004967, Z85986, AL096701, AC004552, AE000658, Z68279, AL031666, AC007688, AL022323, AP000228, AC004953, AP000509, AP000511, AL109798, AP000553, AC009516, AC005072, AC004797, AC002477, AC005940, AL096703, AL135960, AJ131016, AC003690, AF053356, AC000003, AC007773, AF124523, AF031078, AC007790, AC012627, U95740, Z97054, Z83844, AC005088, AP000050, AP000045, AC002301, AP000140, Z93017, U80017, AF030876, AC004491, AC005775, AC005902, AC007151, AL022721, M89651, AC007276, AL049709, AC006141, AP000088, AC006130, AC016025, AC005600, AC005046, AL133371, AC004655, AC002036, AC004765, AC006157, AP000049, AC004242, AC005067, AC005015, AL049757, AP000356, AL022315, Z93241, AC004941, U07562, AC005747, AC003688, AC007731, AC002504, Z98950, AC003982, AF001549, AC004019, AC004985, AC005500, AP000311, AC005763, Z98051, AJ003147, AC006539, AC006344, AL022238, AC004804, AC006511, AC004477, AC005562, AL031005, AC006388, AB012168, AC004152, AC004851, AC000353, AC003983, and AL031602. |
| HNHEU71 | 5006 | 1 - 278 | 15 - 292 | |
| HNHEV25 | 5007 | 1 - 123 | 15 - 137 | |
| HNHEV44 | 5008 | 1 - 690 | 15 - 704 | T79157, AI696334, H89746, AL133216, AF020782, AC004883, and Z96681. |
| HNHEV46 | 5009 | 1 - 181 | 15 - 195 | |
| HNHEV49 | 5010 | 1 - 303 | 15 - 317 | |
| HNHEW03 | 5011 | 1 - 483 | 15 - 497 | AL022098. |
| HNHEW14 | 5012 | 1 - 477 | 15 - 491 | T59662, T59795, and AF147377. |
| HNHEW19 | 5013 | 1 - 359 | 15 - 373 | |
| HNHEW21 | 5014 | 1 - 243 | 15 - 257 | |
| HNHEW75 | 5015 | 1 - 402 | 15 - 416 | |
| HNHEW76 | 5016 | 1 - 391 | 15 - 405 | |

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| HNHEW95 | 5017 | 953566 | 1 - 382 | 15 - 396 | AC005624. |
| HNHEX12 | 5018 | 970764 | 1 - 362 | 15 - 376 | |
| HNHEX40 | 5019 | 711225 | 1 - 412 | 15 - 426 | AI339302, AA534221, AA678404, N57939, AW007294, AI291560, AC005667, AC004382, AC000353, AF030453, AC005088, AC004770, AC004835, AC007450, AL132777, AL035685, AL133355, AC005620, AC003012, AC022517, AC004598, AC005006, AC006449, AC003109, AL139054, AC004841, AC003684, AL022162, AL035450, AC004012, AC004985, AL035079, AC004447, AC005300, AC006126, AF196779, AL133500, AC002349, AC004228, AC002480, AL079342, AC004813, AC006101, AL049781, Z84476, AF139813, AL050341, AC004884, and AC005790. |
| HNHEX54 | 5020 | 575783 | 1 - 423 | 15 - 437 | AL049646, Z55781, and Z54485. |
| HNHEX66 | 5021 | 860036 | 1 - 410 | 15 - 424 | |
| HNHEX77 | 5022 | 860037 | 1 - 418 | 15 - 432 | |
| HNHEY59 | 5023 | 959668 | 1 - 401 | 15 - 415 | |
| HNHEY63 | 5024 | 575741 | 1 - 384 | 15 - 398 | AL047308. |
| HNHEY93 | 5025 | 575745 | 1 - 290 | 15 - 304 | Z82217, U95626, AC007751, AC005863, AC002288, and AC008069. |
| HNHEZ07 | 5026 | 953438 | 1 - 141 | 15 - 155 | |
| HNHEZ18 | 5027 | 575788 | 1 - 154 | 15 - 168 | |
| HNHEZ19 | 5028 | 887442 | 1 - 293 | 15 - 307 | AL119623, and AB020628. |
| HNHFA05 | 5029 | 860033 | 1 - 506 | 15 - 520 | |
| HNHFA11 | 5030 | 967126 | 1 - 397 | 15 - 411 | |
| HNHFA35 | 5031 | 577302 | 1 - 398 | 15 - 412 | |
| HNHFA59 | 5032 | 576394 | 1 - 400 | 15 - 414 | AW083544. |
| HNHFB09 | 5033 | 575786 | 1 - 422 | 15 - 436 | AI612930, AA365413, AA224238, AA531079, AA074342, AA077737, AA679532, AA582463, N25272, AL042927, AA484658, AA847702, H02485, AA779454, AW265090, AI682665, AW129526, AI061313, AC006285, AC016025, L78810, M63391, AC004000, AC018633, M87925, AL035887, AC005778, AC005060, AC005523, AC003695, AC002091, AC004973, AL133312, AL078639, AC005696, AC005089, AC004031, AC005694, AC004655, AC007270, AC004981, AC005527, AL022336, AL139054, AC007637, AC004771, AC000072, AC006241, AL132777, AC007666, AC006387, AC006380, AF010400, AC005829, AL031662, AC004231, AP000065, AC003682, AC008125, AL080317, AC003025, AL021397, AC007676, AC005363, Z97054, AL096712, AF139813, AC004257, U89337, AC004643, U67220, Y18000, AL031431, L77569, AL049776, AC004228, AC007227, AL133448, AC005901, AL035071, AC006130, Z83846, AC005592, AB016195, AC004967, AC004787, AC004983, AC007688, AC001228, AP000228, AC003029, AC003684, AC012627, Z73420, AC019014, AC004760, AP000140, AC002464, AC005529, AC005049, AC002303, AC005220, AC008171, AC007314, AC005668, AC004150, AL020995, AC005520, AC005086, AL096861, AC006441, AC002365, AC002504, AC005274, |

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| HNHFB19 | 5034 | 668713 | 1 - 274 | 15 - 288 | AP001053, AC006120, AL049565, AC007263, AC004821, AL049830, Z98752, AP000088, AC004067, AC005620, AL023807, AC003070, AC005015, AL096701, AC006701, AC006476, AL109758, AC005291, AC004263, AC007172, AL109628, AC003043, AC006530, AC005207, AC004814, AC002477, AC006333, AL049743, AL009179, AC005369, AC006277, AP000172, AP000057, AP000125, AL035460, Z85995, AC004230, AL117337, AC005755, AC007649, AC009516, U29895, AL121653, and AC006125. |
| HNHFB27 | 5035 | 576865 | 1 - 415 | 15 - 429 | AC002073. |
| HNHFB32 | 5036 | 836006 | 1 - 432 | 15 - 446 | AC007845, AC016025, and AC016026. |
| HNHFB39 | 5037 | 575740 | 1 - 408 | 15 - 422 | AI082315. |
| HNHFB53 | 5038 | 728265 | 1 - 393 | 15 - 407 | |
| HNHFC34 | 5039 | 860027 | 1 - 376 | 15 - 390 | |
| HNHFC43 | 5040 | 583660 | 1 - 494 | 15 - 508 | L47334, AC004944, U95739, and AL118509. |
| HNHFC60 | 5041 | 576438 | 1 - 522 | 15 - 536 | |
| HNHFC61 | 5042 | 577185 | 1 - 380 | 15 - 394 | |
| HNHFC67 | 5043 | 576385 | 1 - 348 | 15 - 362 | |
| HNHFC78 | 5044 | 576435 | 1 - 376 | 15 - 390 | AI525653, AI525669, and AI557222. |
| HNHFC92 | 5045 | 577240 | 1 - 326 | 15 - 340 | Y18000, AC004882, and AC005529. |
| HNHFD46 | 5046 | 576796 | 1 - 370 | 15 - 384 | |
| HNHFD88 | 5047 | 506354 | 1 - 345 | 15 - 359 | AC004556. |
| HNHFE07 | 5048 | 953585 | 1 - 68 | 15 - 82 | |
| HNHFE40 | 5049 | 576431 | 1 - 404 | 15 - 418 | AF002994. |
| HNHFE69 | 5050 | 577244 | 1 - 329 | 15 - 343 | |
| HNHFF08 | 5051 | 860229 | 1 - 685 | 15 - 699 | AA506952, T52745, AI280574, AA832016, AI270177, AA831801, H81732, AA358086, M78131, F23264, AI554725, AI436330, AA320105, AA602906, AI249365, AA633424, AI568659, AW439703, N99245, AA635439, AI928890, AA730035, AW020150, AW151541, AI521525, AI362694, AA635433, AI298079, AI653525, AW006088, AW088130, AA809153, AI619987, AL046416, AW304580, AL040374, AW238712, AI055537, F07564, AA553394, AA622801, AI753672, AL040816, R70884, AI345497, AA932407, AA015948, AI610439, AA525331, AA650447, AI871913, R70883, AA525293, AA365980, AA508036, AI918419, AA811954, AI251576, AW407632, AA937809, AA351808, AL118925, AI754567, AW419389, AW102811, AI754105, AI358712, AI755214, AA743968, AI096874, AI686563, AI040273, AI306232, F00688, AA838091, AA806804, AW274191, AI609972, AI990666, AL041375, R87135, AI863279, AI635440, AA282951, AI419337, AI361090, F30310, AI479068, AW189113, AA378474, AA533054, AA834764, AA057522, AA594719, AA528744, AA525522, AI207422, AI421950, AL079734, AA454504, AL079339, Z82244, AC005338, AC020663, AL117355, AF091512, |

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| AL049591, Z97876, AL079340, AL121595, AL021707, AC002994, AI008635, AL034402, AL035659, AC004881, AF111168, AJ003147, Z84484, D87675, AC005887, AC003957, AC004805, AL031985, AL031431, AC005902, AC007066, AP000141, Z85987, AC005695, AL031278, AC005828, D86995, AL121603, AP000088, AC007688, Z83826, AC005181, AC018633, AL022165, AF109907, AC005067, AC007773, AL096775, AF038458, AC006360, AC005089, AC004263, AC004520, AC004997, AB003151, AL008626, AL122007, AL008719, AL049792, AC005932, AL079305, AL109829, AL035461, AL136295, AC006343, AC005585, AC005578, AC006960, AL031662, AL022326, AC006026, Z83847, Z95118, AL035460, AC006196, AL024507, AC003046, AL121658, AP000689, AB014085, AC004187, AP000515, AB020868, AL035413, AC002073, AL035086, AC006064, AC006312, AC004941, AL135744, AL117693, AC002351, AL049829, AC005912, Z98743, AC007025, AC009294, AL031848, AP000108, AB001523, AC007541, AL031286, L35532, AC002400, AC005017, AC005375, AC002069, AL031280, X64467, AC006441, AL049844, AC005081, AC004230, AL031592, AC002316, AC005358, AC005215, AL031904, AL080243, AL031776, AL031984, AF099810, AC007114, AL022313, AC002395, AL022394, AC004686, AC007546, AC005821, AC007899, AC007792, AC007565, AC006557, AF064857, AC004383, AC004797, AL133245, AC007536, Z82976, Z99943, AC004712, AL031686, AC004638, AC004148, AL049694, AL079342, AC007036, AC005031, AP000031, AC007388, Z97053, AL109839, L18750, AC003025, AC005525, AC007157, AP000255, AC005781, L11910, Z86064, AC006004, U62631, AC005746, AC004241, AC004675, AC002310, AL034554, AF139813, AF141309, AP001054, Z83838, AC005537, AC004593, AC002310, AC003037, AF207550, AC004531, AC005018, U80017, AF126403, AL021391, AL080313, AL031276, AL031186, AC005519, Z49258, AC015853, AP001063, AP000501, AL023575, AP000213, AF088219, L47334, AL117258, AC004577, AC005479, AP000501, AC008268, AC004042, AF047825, Z82205, AC002107, AC005786, Z84483, AL049650, AC003007, U95742, AF001550, AL133382, AC004216, AC010200, AP000303, AP000135, AP000046, AC006959, Z98036, AL031778, AF016898, AL050334, AF067844, U63721, AC004938, AC007227, Z99716, U85195, U08988, AC012085, AL031685, AL049631, AC005587, AC006287, AL035249, AC004253, AL035398, AL021394, AL050341, AL009172, AC003012, and AP000473. | | | | | |
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| | | | | | AC004382. |
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| HNHFF21 | 5052 | 625613 | 1 - 326 | 15 - 340 | |
| HNHFF29 | 5053 | 576412 | 1 - 268 | 15 - 282 | |
| HNHFF56 | 5054 | 576432 | 1 - 434 | 15 - 448 | |
| HNHFG07 | 5055 | 953569 | 1 - 386 | 15 - 400 | |
| HNHFG11 | 5056 | 967255 | 1 - 316 | 15 - 330 | |
| HNHFG37 | 5057 | 658459 | 1 - 393 | 15 - 407 | |
| HNHFG94 | 5058 | 720292 | 1 - 389 | 15 - 403 | |

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| HNHFH21 | 5059 | 1 - 576 | 15 - 590 | N28488. |
| HNHFH56 | 5060 | 1 - 243 | 15 - 257 | |
| HNHFH78 | 5061 | 1 - 386 | 15 - 400 | |
| HNHFI69 | 5062 | 1 - 128 | 15 - 142 | AC007226, U95743, AC006363, and AL022345. |
| HNHFI88 | 5063 | 1 - 343 | 15 - 357 | |
| HNHFI95 | 5064 | 1 - 434 | 15 - 448 | |
| HNHFJ45 | 5065 | 1 - 439 | 15 - 453 | |
| HNHFJ67 | 5066 | 1 - 444 | 15 - 458 | AA293828, and H66294. |
| HNHFK37 | 5067 | 1 - 389 | 15 - 403 | |
| HNHFK77 | 5068 | 1 - 440 | 15 - 454 | R43540, R48276, R48377, R43540, H14811, H14844, H25270, R98805, H48383, H61221, N29968, W23460, W73630, W73678, W95886, AA031537, AA085279, AA166981, AA195032, AA195160, AA211848, AA252180, AA291950, AA470617, AA527697, AA527705, AA523619, AA610324, AA610375, AA631087, AA639486, AA662219, AA761630, AA769549, AA836835, AA857900, AA877434, AA887793, AA911923, AA919116, AI031861, AI088765, AI097438, AA242793, AA291420, AA434487, AA670443, AA680029, AA434391, AA707307, AA719146, AA723473, AA725011, AA780009, AA854072, AA854177, AA904890, AA927579, AI026017, AI026142, AI027032, AI039424, AI082533, AI092443, AI095580, D45614, AI306736, AI311850, AI344587, AI346859, AI401696, AI475602, AI491923, AI560607, AI561040, AI565775, AI497986, AI567445, AI582162, AI424489, AI127220, AI129847, AI131403, AI216030, AI218681, AI221771, AI240379, AI659547, AI538610, AI539637, AI275475, AI332813, AI349444, AI350915, AI589172, AI682495, AI684064, AI689701, AI763230, AI829821, AI831189, AI831933, AI870019, AI870152, AI888031, AI811628, AI914567, AI918439, AI921759, AI937559, AI952650, AI952779, AW004929, AW005538, and AW024659. |
| HNHFL48 | 5069 | 1 - 294 | 15 - 308 | AJ007751, AC010517, AJ007752, D29748, AJ130757, S67971, and AJ130755. |
| HNHFL82 | 5070 | 1 - 386 | 15 - 400 | AL021528. |
| HNHFM01 | 5071 | 1 - 290 | 15 - 304 | AL096757. |
| HNHFM32 | 5072 | 1 - 346 | 15 - 360 | |
| HNHFN30 | 5073 | 1 - 398 | 15 - 412 | |
| HNHFN52 | 5074 | 1 - 216 | 15 - 230 | |
| HNHFN95 | 5075 | 1 - 316 | 15 - 330 | |
| HNHFO45 | 5076 | 1 - 351 | 15 - 365 | |
| HNHFO48 | 5077 | 1 - 624 | 15 - 638 | H05570, and AC005146. |
| HNHFP09 | 5078 | 1 - 299 | 15 - 313 | AL031590. |
| HNHFP10 | 5079 | 1 - 440 | 15 - 454 | |
| HNHFQ01 | 5080 | 1 - 338 | 15 - 352 | |
| HNHFQ19 | 5081 | 1 - 149 | 15 - 163 | |

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| HNHFQ30 | 5082 | 692807 | 1 - 272 | 15 - 286 | |
| HNHFQ75 | 5083 | 766595 | 1 - 343 | 15 - 357 | |
| HNHFQ88 | 5084 | 576398 | 1 - 436 | 15 - 450 | AI420786, and AC005592. |
| HNHFQ92 | 5085 | 576400 | 1 - 139 | 15 - 153 | |
| HNHFR12 | 5086 | 860003 | 1 - 303 | 15 - 317 | |
| HNHFR22 | 5087 | 964716 | 1 - 430 | 15 - 444 | AA640685, AA804925, AI289850, F29541, AA601195, AI471691, AA728937, AL133448, AC005722, AC004895, AC005529, AC005488, AF165926, AF109907, Z83822, AC005015, AC004882, AF207550, AC006285, AF053356, AC006071, AP000689, AB003151, AC002994, AC007688, AC006953, AL109798, AC005412, AC009247, AC006946, AL031311, AL096791, AC005837, Z95331, AC007263, AC004967, AC005089, AL031666, Z93017, AL135783, AC006449, AC006277, AL022328, AP000049, AP000116, Z95116, AC000353, AP000311, AC006538, Z83844, AC007216, AL035684, AC002369, AC006120, AC004905, AC006023, AF064861, AC002302, AC003043, AL078638, AL008718, AP000557, AD000091, AC005280, AC007546, AL021707, AL133246, AL035072, AC005206, AL049779, AP000036, AC005081, AC004150, AC000134, AC004383, AC005520, AP000343, AC007285, AL023575, AL135960, AJ131016, Z98946, AC005667, AC004453, AC007151, AL035423, Z86090, AC004682, J02698, U73636, AL132777, AC005231, AC002996, AL021397, AP000352, AC005736, AL096701, AL022476, AC005180, AC005778, AP000031, AL009181, U82668, AC004228, AC005952, AC004859, Z84474, AC006430, AC004821, AC003950, AL031595, AC004985, U47924, U95742, Z98036, AC003670, AL031005, and AL049569. |
| HNHFR24 | 5088 | 577330 | 1 - 322 | 15 - 336 | |
| HNHFR67 | 5089 | 751787 | 1 - 338 | 15 - 352 | |
| HNHFS03 | 5090 | 924610 | 1 - 511 | 15 - 525 | |
| HNHFS79 | 5091 | 734798 | 1 - 416 | 15 - 430 | AC005747. |
| HNHFU09 | 5092 | 625726 | 1 - 433 | 15 - 447 | AC002069. |
| HNHFU35 | 5093 | 707335 | 1 - 298 | 15 - 312 | |
| HNHFU45 | 5094 | 920844 | 1 - 432 | 15 - 446 | AL109758. |
| HNHFU57 | 5095 | 860002 | 1 - 435 | 15 - 449 | AW304536, AI356440, AA102737, H29914, AA715173, AA715075, AA904211, R93919, AA314891, AW008169, AI433104, AA302661, AA541532, AI281561, AA338238, AI133514, AA568204, AA570740, AA483606, AI571538, AI249683, AL138329, AA338237, H68360, AI491765, AI189682, AA630854, AA206230, AA664604, AI355246, AW023111, AI336771, AW084967, AA493947, AL041375, H38769, AA491767, AA515939, AA714110, AA846923, H84412, AA626829, AI792529, AI054193, T90477, AA632765, AI609972, AA161492, AA857812, AA279919, AA493808, AI538236, AA297208, AC005412, AC005529, AL035461, AJ012008, AC005088, Z83844, Z95115, AC002351, U91321, AC005696, AC005529, AL049710, AC004084, AC004796, AF172277, AL133312, AC003070, AC006205, AL049569, AL031432, |

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| HNHFV16 | 5096 | 952376 | 1 - 360 | 15 - 374 | AL034548, AJ251973, AC005520, AC006538, AC006071, AL096816, AC005071, AP000272, AL022476, AC006312, AL049712, AC005089, AF047825, AC007308, AC005763, AP000501, AC006948, AC002470, AL049856, AC007637, AP000248, AC007537, AC005793, AC005527, AC004884, AF196971, Z98743, AC007708, AL031311, Z95331, AC004983, Z93023, AL049697, AC007011, AC004098, Z98941, AC002425, AC004019, AP000030, AL031003, AP000104, AL049591, AC002300, AC000025, AL035405, AL031281, AC002375, AL049766, AL021154, AL034423, AC005592, AC007114, AL049836, AC007237, AC002994, Z93241, AL022336, Z97053, AL122020, AL031848, AC005695, AL031685, AC004819, AC005070, AL033527, AP000510, AL035413, AC005841, AL117694, AC005086, AP000194, AC005562, AC006241, AC005920, AL035652, Z84487, AC007298, AL035071, AC003043, AC004448, Z82179, AL031680, AL035086, AC004382, AC003010, AC007225, AL022396, AC006965, AP000692, Y18000, AC004491, AC006141, AC005233, AF067844, AB023049, AC005330, AL022163, AC005789, Z95114, AF126403, AC004799, Z97056, AL049636, AL049839, AC005280, AC007066, AC005484, AC005317, AL031427, AC004962, AC007774, AC000052, AC006441, AC009516, AC005541, AL121658, AC002070, AL009181, AC004149, L78833, AC005606, AC003982, AP000010, AP000504, AF088219, AC004910, AL031729, AC005839, Z83846, AC005632, AC002119, AC002072, AC007344, U95740, AC003662, AC002350, AC004686, AF196779, AC005803, AL035089, AL049776, AC006115, AC002996, AL079342, AC005962, AC002565, Z98884, AL008582, AL035462, AL031777, AF207550, Z98044, AL031228, AL021393, AJ246003, AC004963, AL031431, AC000353, AL031906, AC004812, AC005670, AC007993, AC005932, AB016897, AC006511, AF001548, AC005295, AC004815, AC004814, AC002045, AL121603, Z82188, AL035249, AC002288, AC006449, AL080317, AL035420, AF024533, AL022313, AC006057, Z96074, AC005971, AC005291, AC012384, AL031587, AC005535, AC005736, Z98749, AC002302, AC004865, AB014077, AC006229, AC007227, AL132712, AC006512, AL021155, AC004552, AL035683, AC006953, AC009946, AC005666, AL035587, AC004828, AL109756, AP000054, U95090, AP000011, AC002476, AL023096, AC005316, AC005399, AC005244, AF042089, AL035400, Z84469, AC004816, AC007199, AL022577, AC007934, AC007421, and AL096701. |
| HNHFV52 | 5097 | 576390 | 1 - 387 | 15 - 401 | AL022319. |
| HNHFV56 | 5098 | 724417 | 1 - 514 | 15 - 528 | |
| HNHFV66 | 5099 | 860000 | 1 - 350 | 15 - 364 | |
| HNHFV68 | 5100 | 925820 | 1 - 334 | 15 - 348 | AA045668, T51787, and AI752482. |
| HNHFV70 | 5101 | 757281 | 1 - 317 | 15 - 331 | AA045947, AA367403, AC003976, AC005702, AC005562, and AC003958. |
| HNHFW08 | 5102 | 959476 | 1 - 406 | 15 - 420 | AA075754, AA618286, AA295899, AA295893, AA774098, AA354695, AI859744, AA483141, AW327555, AA633892, AA340226, AA569448, AA834799, AF034176, AA376358, AI732911, AA177130, AA225634, AA825954, AA452325, AA730795, AA496268, T06805, F16409, |

W96277, AA340153, C16638, AA020873, T47138, AA831913, AC005089, AC005610, AL022320,
AC006026, Z92546, AJ003147, AP001053, AC004209, AP000502, AL133448, AF019413,
AP000558, AC005331, AC002395, AP000353, AP000557, AL049709, AC009247, AC009516,
AC001228, AC004491, AC005255, AC007421, AC005015, AP000031, AC004492, AC005763,
AF134726, AL035420, U91326, U95742, AC009399, AC005844, AC004522, AC007216,
AL031602, AC006367, AC006511, AC002369, AC005071, AC004813, AC006536, AC006254,
AC006539, AL021391, AC006101, AD000092, AC007676, AL031846, AC006126, Z84721,
AL031285, AC002492, Z79997, AL034417, AC006432, AC005585, AC004650, AC007510,
Z98946, AC004552, AC005280, AC006012, AC005379, AB023048, AF064861, AP000511,
AC005755, AL078611, AC007262, AC005291, AL031120, AL034553, AC004253, U58675,
AL049692, Z85987, AC002425, AL035667, AC004913, AC005566, Z93241, AC007151,
AL049539, AC005768, AL096773, AC004242, AC005037, AC005783, AC006950, AC008115,
AC004771, AC005519, AC002544, AC002997, AL031311, AF031078, AF031076, AF030876,
AL021578, AF111163, AC005696, AC005778, AC005099, AC002073, AC007541, AF045555,
AL035659, AC005736, AL049745, AC003006, Z99716, AC004021, AJ246003, Z83838, Z97206,
AC007551, AC007559, Y18000, AC016830, AC007066, AC006948, AL049775, AF222686,
AC004526, AC004559, AL135960, AJ131016, AC007486, AC004020, Z84469, AC006538,
Z84480, AC008041, AL035089, AC007688, AC004882, AL049636, AL109628, AC004741,
AL096791, AC005378, Z83843, AL049839, AC005808, AC005839, AC005529, AC006023,
AL035658, AP000213, AC004878, U66722, AC005081, AC004876, M89651, AC007685, Z82244,
AC005320, AL096712, U91322, AL031848, AP000135, AC007051, AL035086, AC004859,
AL049760, AC005859, AC002984, AC006120, Z93023, Z92542, AC007308, AC002430,
AC005399, AF196779, AL109623, AC007207, AC004106, AL031577, AC004842, AC004765,
AC004963, AC005412, AC009464, AL031681, AL008719, AF196971, AC007537, AC004662,
AC005730, AC007387, AL031447, Z97987, AL049563, AL021154, L78833, AC007546,
AL117355, AL035681, AC003956, AC005971, AC004887, AJ011930, AL035072, AL139054,
AP000513, AP000134, AP000212, X96421, AC007227, AC004596, AC002045, AL031588, Z82198,
Z95115, U91321, AC006946, AP000114, AC004167, AL031778, AL080243, U95743,
AC006285, U91321, AC009336, AC004996, AC004883, and AL049557.

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| HNHFW29 | 5103 | 663912 | 1-410 | 15-424 | |
| HNHFX22 | 5104 | 674638 | 1-189 | 15-203 | |
| HNHFX35 | 5105 | 668656 | 1-344 | 15-358 | AC005519. |
| HNHFX56 | 5106 | 716628 | 1-402 | 15-416 | |
| HNHFX68 | 5107 | 753045 | 1-96 | 15-110 | AC004468. |
| HNHFX70 | 5108 | 756459 | 1-381 | 15-395 | Z54072. |
| HNHFX89 | 5109 | 712347 | 1-413 | 15-427 | |

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| HNHFY21 | 5110 | 1 - 408 | 15 - 422 | |
| HNHFY95 | 5111 | 1 - 363 | 15 - 377 | |
| HNHGA24 | 5112 | 1 - 433 | 15 - 447 | AF095901, AC005971, and AC003006. |
| HNHGA33 | 5113 | 1 - 189 | 15 - 203 | |
| HNHGA46 | 5114 | 1 - 359 | 15 - 373 | AA579437, R98945, AI168274, AI092694, T68597, AW161893, AW438907, AA618172, AI085078, AA632695, H27102, AC007676, U91326, Z49154, AC005516, AP000066, Z98941, AL031685, AC004056, AC006449, AL031680, AC005921, Z84484, AC007559, M63796, AC002400, AL022476, AC002302, AF024533, AC006965, AC005940, AC005479, AL121655, AL035495, AP000349, AC005102, AL050307, AC003962, L44140, AC005156, AL139054, AC003689, AF001549, AC006544, AC005332, AC002565, AC006581, AL035086, AC005785, AC006076, AL031681, AL049709, AC006572, AC007637, AC005523, AC004584, AL009031, and AR017567. |
| HNHGB83 | 5115 | 1 - 325 | 15 - 339 | AA604326, AA483223, AA513850, AA486580, AA533036, AA548511, F25695, AA824655, AA127636, AA641199, AA568778, AL044438, AA601355, AA670468, AA481050, AA397572, AA486885, AA824654, AA368679, AA678443, M77868, AA081909, AA488249, N20967, AA346575, AA623002, AA577906, AA973803, AA446657, N22533, AA347114, AA906889, AA649722, AA720691, H86097, AA669840, AA858197, AA357552, AA503473, AA928904, T53128, AA341336, AA643469, AA490183, W96048, AA078691, AA653964, AA805860, T28708, AA740921, AA458736, AA702745, AA678436, AA059472, AI002796, AA678772, AA644538, AA810370, F35659, AA158301, AA788883, AA604854, AA134347, F09736, AA204718, R32415, AA319830, AA610420, AA602528, AA304977, R84296, AA838096, N20219, AA704643, AA325597, AA480790, AA235466, AA158328, AA330380, AA525151, T94817, AA825299, AA833792, AA053551, AA834755, AA678499, AA633094, AA552843, H96850, T16056, AA484153, AA664135, T55236, AA132914, AA702293, AA437161, AA630606, AA604107, AA629571, AA280632, AL134267, R97934, R84309, AA812433, AA630025, D57369, R65889, AA524809, AA526757, R92288, AA715263, R84303, H02877, W16581, AA603156, AA459873, AI648558, AA826793, AA347170, H11124, AA287640, AA608595, AA994578, AA639248, AA584749, H02135, N69316, T49241, AA434388, H79151, II80306, AL037050, AW069807, AA483780, AA143490, T67750, AA053635, AA172191, AA774184, AA190895, AA632548, T15897, AA515909, AA605032, AA167643, AW390062, AA494025, AA908857, AA524838, AA654761, AA846929, AI890096, AA405493, AA557854, AI275328, AA569167, AI251250, AI284881, AA521355, AA574110, AC006512, AF003529, AC002384, AF029308, AC004690, Z95124, Z95331, AF227510, AL031965, AC003973, AL049837, AC006560, AC006548, AF130343, AC006511, AL136520, AC004075, AC007372, Z68870, AP000507, AC007161, Z97206, AC004968, AC005191, AC005690, AC008069, AC004006, Z83841, AC004614, AC005036, AC012083, AP000086, AC005181, AL135233, AL049562, AL109654, AC009285, AF070718, AP000166, AL121871, AB020868, AL133233, AL049562, AL109654, AC009285, AF070718, AP000166, AL121871, |

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| HNHGB96 | 5116 | 784362 | 1-406 | 15-420 | AC006052, AP000705, AB000880, AC004520, D86998, AB000882, AC005261, AC006383, AC004541, AC005875, AL049588, AC002038, AL110503, AC002536, AC005820, AC008173, AC004926, AL008734, AP000223, AL031114, AL008626, AC006459, AC007106, AC002467, AL030999, AF003528, AC005553, AF196970, AC006572, AL109985, AJ006997, AC004222, AL034369, AL117693, AL078640, D86999, AC007446, AL133224, AL031785, AF011889, AC010582, AC008014, AL033524, Z69923, AC004215, AC002302, AC005752, AL035252, AP000318, AC006137, AL121934, AC002978, AP000120, AC007380, AL031983, AL121767, Z82211, AL110292, AL008629, AC003990, AC002487, AC010170, AC005881, AP000431, AC004605, AC005150, AL096827, AC005486, AL031223, AL132641, AC006120, AC005550, AP000302, AP000350, U07000, AB023048, AP000511, Z78022, AP000114, AP000046, L43392, AC005040, AL020997, L49046, AC002418, AC004386, Z68192, AC007022, AP000501, U13056, AC007528, AC004820, AC006559, AL049557, Z83313, AC007966, AF112866, Z92844, U67274, AL034407, U20770, AL096767, AC002550, Z68289, AC005993, U40401, AC005988, AC000003, AL132800, AP000495, AF193806, AL133404, U95740, Y12508, L77570, AC007677, AC002538, Z92540, AB022537, AC003957, AC004559, AF029750, AC003043, AC005104, Z99495, AC002350, AC005911, AC003070, AF060568, AC004662, AC006365, U91326, U91322, Z93942, AJ009610, AC003071, D83657, AC005778, AF064863, AP000259, AC008119, AP001060, AC009336, U73633, AJ006995, AC006255, Z73900, M63796, AF042090, AC005531, AC004047, X62695, AB023052, AC004474, AC002369, AC003678, AC004964, AL021398, AC005610, AC006138, AC000052, AC005086, AC005280, AC007688, AP000300, AL109656, and AP000513. |
| HNHGC13 | 5117 | 927065 | 1-344 | 15-358 | |
| HNHGC35 | 5118 | 707337 | 1-310 | 15-324 | AI804902, AC006117, AC007421, and AF051976. |
| HNHGC41 | 5119 | 711654 | 1-259 | 15-273 | |
| HNHGC62 | 5120 | 733745 | 1-641 | 15-655 | H40460, T87587, T99479, T79930, T98889, R45850, and H40461. |
| HNHGD07 | 5121 | 953416 | 1-412 | 15-426 | AI798767, AI762354, AA960878, AA994187, AI150216, AI203673, AW304455, AI669778, AI638227, AI629021, AI032379, AW206145, AI216900, AI652606, AI949596, AI200754, AI652758, AA365065, AA400904, AA775880, AA935607, AA628104, AA913740, AA682231, AA442250, and AA970252. |
| HNHGD14 | 5122 | 920149 | 1-425 | 15-439 | |
| HNHGD50 | 5123 | 667930 | 1-341 | 15-355 | F31867, AI250552, AI251034, AI251203, AI251284, AI223626, AI246061, AI090334, AI251241, AW303098, AA502098, AI312533, AL135605, AW339422, AI798041, AW249541, AA491814, T99717, AA356310, T55707, AA746959, AA492114, AI249886, AA747480, AI358008, AC004778, AC007201, AI096791, Z93930, Z98200, AL009181, Z82208, AC005778, AL031848, AL109798, AL078476, AC006130, AC005841, AC007546, AC005387, AC005776, AC007100, AC005837, |

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| HNHGD51 | 5124 | 934632 | 1-392 | 15-406 | AC007225, AF196779, AC005399, AL031666, AC003101, AL022313, AC004815, AC005231, AC006312, AC003043, AC004526, AC005632, AC004797, AC020663, AC005332, AC005796, AC004019, AC002073, AL022311, AC005538, AL080243, AL022326, AC006948, AJ246003, AC007227, AC005180, U34879, AC005225, AP000555, AC006208, AC007878, AC005899, AC005207, AC005529, AC003104, Z94056, AL022336, AC007308, AC003042, AL121658, AC007637, AC002470, AC006011, AL031735, AC005562, AL096701, AL132712, AC009509, AC004887, AL080242, AC002492, AC004596, AC018633, AC006536, AC007172, AC002117, AD000812, AL021977, AL031584, AC002543, AC003098, AC004150, AC005786, AP000502, AD000092, AF030876, AC005527, AL034549, AC007774, AC005175, AL022240, AC006449, AC007216, AC002425, Z99716, AC005291, AC005157, AC005288, AP000694, AL049760, AC002429, AC005911, AC005913, AF134726, Z49235, AP000117, U47924, AP000557, AC005081, AC005756, AC003957, AC002301, AL022322, AL132777, AL133448, AL049776, AC004560, AL021068, AC006973, AL034375, AL022163, AL031311, AC005703, AL049829, AC006021, AP001067, AP000050, AF047825, AP000313, AC004854, AL008582, AC005512, AL023553, AP000952, AC004765, Z84479, Z83840, AL049692, AC000134, AC000026, AC006511, AC004678, AC005003, AC005071, AL021707, AC003688, AC007376, D16561, AJ238413, AF111169, AL022238, AC004771, AC003108, AC002565, AL109827, AC005620, AC009247, Z93023, U63721, AC004216, Y18000, AC010025, AC004263, AC005193, AC016026, AC000052, AP000704, AC005602, AC002369, AC007792, AC006390, AC005089, AL050333, AC004447, AL035419, AF002991, AC002059, AL022237, AP000193, Z95113, AC005215, AL050337, AF205588, Z94161, AC006285, AC005829, AC006026, AC004813, Z92542, AC004814, AC007687, AC002985, AC004812, Z98051, AC009516, AC004383, AC002544, AL031432, Z95115, AC005222, Z98044, AC007226, Z85987, AL109952, AC004878, AC005218, AC006441, AL096775, Z69666, AP000049, AC004254, AC004400, AC006111, AL121655, AC002126, AF126403, AF129756, AC002044, U91325, Y10196, AC004805, and U95742. |
| HNHGD68 | 5125 | 753053 | 1-393 | 15-407 | AC005043, and AL035417. |
| HNHGD84 | 5126 | 671077 | 1-414 | 15-428 | AC005242. |
| HNHGE09 | 5127 | 939727 | 1-633 | 15-647 | T03269, D58283, D80193, D59927, D80166, D80195, D51423, D59619, D80210, D51799, D80391, D80240, D80253, D80043, D80227, D59859, D80212, D80196, D80188, D80219, D80038, D80269, C14429, D59889, D81030, D80366, D59502, D57483, D80022, D59275, D80045, D59610, AW178893, D80378, D50979, D50995, D80024, D59787, D80241, D51097, C14014, C75259, D80164, C14331, D80134, AI905856, D59467, AW177440, C14389, C15076, AW179328, AW178775, AA305409, AW378532, D51060, AW352158, AW177501, AW177511, AW352117, D80949, D80168, AW178762, D58253, D51079, D51022, AW176467, AW375405, AW360811, AA305578, AW377671, AW366296, D80251, AW360844, AW360817, AW360834, D81026, AW375406, AW378534, D80248, AW179332, AW377672, AW179023, AW178905, |

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| | 5128 | 1 - 359 | 15 - 373 | AA514188, AW179220, AW352171, D80522, AW377676, AW177731, AW178907, AW179019, AW179024, AA514186, D80133, AW178906, AW177505, AW179020, AW178909, AW177456, AW179329, AW178980, AW177733, AW378528, AW178908, AW178754, AW179018, C05695, D80132, AW179004, D80268, AW178911, D80302, AW178774, D80439, D80247, T48593, AW367967, AW178983, AW177723, AW352174, AA033512, D51103, AW378533, D80157, AW367950, AW178986, D80314, AI535850, C06015, D45260, C14975, AI525913, AI525923, A62298, A62300, AJ132110, A84916, A67220, D89785, A78862, X67155, A25909, AR025207, D34614, D26022, D88547, Y17188, X82626, AR018138, AB012117, A85396, AR066482, Y12724, A44171, A85477, I19525, A86792, AF058696, X93549, AR008278, AB028859, AF135125, U87250, A94995, AR008443, I50126, I50132, I50128, I50133, D88507, AR066488, AR064240, A82595, AR016514, D50010, AR060138, A45456, I18367, A26615, AR052274, Y09669, AR060385, AB033111, AB002449, AR066487, A43192, A43190, AR038669, A30438, AR066490, D13509, AR060133, Y17187, AR008408, A63261, U87247, A70867, Z32749, AB023656, AR062872, U79457, AR016691, AR016690, U46128, X93535, and AR008382. |
| HNHGE27 | | | | |
| HNHGE43 | 5129 | 1 - 315 | 15 - 329 | AA488743, AA308092, AA676628, AL031311, AP000346, AC005839, AL031681, AC007227, AC005105, AC004139, AC007559, AL109799, U85195, AE000658, AL022302, Z95116, AL031671, AL034402, AC004010, AC005225, AC005519, AL031680, AL109963, AL021069, AC004920, AC003024, Z96811, and AC002544. |
| HNHGF64 | 5130 | 1 - 303 | 15 - 317 | AC002470, AL135745, AC002565, AC005015, AC005300, and AC002117. |
| HNHGF14 | 5131 | 1 - 419 | 15 - 433 | AL022097. |
| HNHGF21 | 5132 | 1 - 399 | 15 - 413 | |
| HNHGF37 | 5133 | 1 - 520 | 15 - 534 | |
| HNHGF45 | 5134 | 1 - 372 | 15 - 386 | |
| HNHGF46 | 5135 | 1 - 411 | 15 - 425 | W40172, AA129812, AA382562, AA057128, N44954, W93959, W96112, W65434, AA321463, R91613, AA010986, AA311729, AA456863, AA355485, AA047510, AA133759, T77131, T97680, W44481, Z60594, and AF191020. |
| HNHGF85 | 5136 | 1 - 356 | 15 - 370 | AA745297, AI707744, AW169038, AI570805, AL037777, AA528574, AA528503, R08192, AW304536, AW338042, H01243, AI538236, R99533, H60827, AA630122, W03330, AA434364, AC005089, AL049591, AL021391, AC005881, AC004129, AP000555, U52112, Z93241, AL021707, AF064861, AL024498, AC006080, AC003025, AF139813, AC005666, AC006277, AC005048, AF165926, AC003101, AC007371, AC005952, AL031668, AC031276, AC005376, AC005826, AC006379, AC006948, AC005932, AP000243, AP000126, AP000204, AF047825, AC006241, AC005071, AC005736, AC005546, AF051769, AC007073, AC006023, AL035423, AL031602, AC003982, AL133312, AL049569, L44140, AC007934, AF024534, AP000279, AL031672, U95626, AL078584, AL022320, AC005624, AP000106, AP000038. |

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| HNHGF90 | 5137 | 1 - 392 | 15 - 406 | AL008718, Z83826, AL035071, AC004996, Z83844, AC004595, AC004017, AC004814, AC005225, AC005971, AC005786, Y16789, AP000689, AC002115, AL096817, AC005049, AC004084, AC009721, AC007327, AF196969, AC005519, AC004859, AP000557, M55987, AC007283, AC000353, AL022326, Z93023, AC005562, AC006275, AC003002, AB023049, AL031427, AC009516, AC004841, AP000045, AL035659, AL132712, AL034419, AL022237, X95887, AC005280, Z92845, AC007421, AC007421, AC002072, AC005482, AL031295, AC007792, AP000512, Z82248, AL109758, AC005572, AP000313, AC006029, AP000501, AP000556, AC004782, AC005399, AL035420, U91318, Z98044, AL133448, AC005841, Z97630, AL049760, Y14768, AC004849, AL009172, AL035405, AC005274, AL035587, Z93022, Z98304, AP000050, AC005255, AC006163, AC006141, AP000505, U95740, AL031281, AC004890, and AL035588. |
| HNHGF91 | 5138 | 1 - 418 | 15 - 432 | |
| HNHGG06 | 5139 | 1 - 392 | 15 - 406 | R02639, and R02523. |
| HNHGG73 | 5140 | 1 - 253 | 15 - 267 | |
| HNHGG76 | 5141 | 1 - 246 | 15 - 260 | AI648558, AW236342, AI824562, AA747472, AI697208, AL041706, H55914, AA515435, AA484187, AA649642, AA318652, AA515224, AW440976, AI358571, AI205126, AA483034, H55891, AA077817, AI281697, AI379719, AA017322, AA548137, AA441788, AI064729, F23279, AI216799, AI357551, AI354426, AI251002, W07122, AI291124, AA317170, AI053672, AW079241, AL039958, AI921296, AA514819, AI291268, F37160, AW265393, AI284640, AI537030, AA557686, AI473943, AW303876, AA663482, AI281881, F33121, AW274349, AA084070, AA632650, F36273, AI334443, AI471481, AA745410, AI937850, T63104, AA491762, AA470985, AA483234, AI564185, AW029526, AI133164, AI929531, AI364809, AA503258, AW303196, AW301350, AW338086, F18320, AI251021, AA664148, AW088058, AI252554, AL041733, AI749284, AW162049, AA325699, T06556, AA745582, AA350859, AL137954, AI091495, AI287651, AL079812, AW166815, AW028403, AI821279, AI446464, AW148792, AL079843, AW406162, AA664535, AI434695, AW419262, AA595782, AA825357, R91994, AI351698, AI499938, T08638, AW440299, AA365302, AI219406, T03772, AA533036, N75702, AI358813, AI567674, AA605274, AA252763, AF150152, AI357288, AI570212, AW249835, AW020992, AI312149, AI439210, AA613345, AA713815, T40077, AI434311, AW270270, AW406447, AI110770, AA470534, AW168342, AA177061, AI467919, AW104813, AI888518, AA657741, AA161095, AI890923, AW162489, AA680211, AI281903, AA679872, AI148277, AI279165, AI628288, AA521277, AL038474, AW079792, AW022379, AA652057, AI539563, AI439360, AI962050, AA347927, Z99716, AL049830, AC005323, AL031388, AC005696, AC007363, AC012627, Z98884, AC007036, AC004805, AC000004, Z98948, AP000054, AL110502, AC000066, AC004067, AL034545, AF064857, AP000548, AF044083, AL035411, AC005541, AC005844, AC003668, AC006501, AC006543, AL031681, AC005082, AC002543, |

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| HNHGG89 | 5142 | 772213 | 1 - 343 | 15 - 357 | AJ010770, AC006160, AC004216, AC006946, AC002091, AC000085, AC007510, AL035446, Z97200, AC006596, AC006544, AC008079, U70984, AL034451, Z84487, AC007151, AC007539, AL022310, Z98051, AC006374, AP000506, AB014080, AC006502, AC004506, AC007051, AL133244, AL121595, AC005785, AF205588, AC006287, AL109984, AC005871, AC008268, AL031671, AC007091, AC011604, AL049613, AC004388, AC000073, AL135783, AL021307, AB000882, AC004694, AC004893, AC006582, AC002994, AL132994, AC004894, AC005084, AC006344, AL121578, AC006952, AC003664, AF196971, AC004020, AC004907, AL022160, AC007436, AC009411, AP000365, AC004917, AC006996, AF201337, U92032, AJ011930, Z95152, AC005826, AL031599, AP000008, AL096707, AL078624, AC004049, AC002524, AL033525, U66059, AC004171, AC003016, AC006379, AC006536, AC004636, AF188025. AC010722, AP000514, AC006120, AC003971, AC004745, AC002531, AC008498, AC007387, AC006026, AP000704, AL022161, AF124730, AC006111, AC010170, AC007488, AL121877, AP000965, AC002385, Z72001, AC007919, AL031054, AL008715, AL022578, AC002422, AL136018, AC004486, AF123462, AL050341, AP000566, AC006515, AC008372, AL049588, U72787, Z99758, AL096861, AC009069, AP000115, AL049633, AC008372, AC003035, AC004069, AC002480, AL031286, Z83216, Z83820, AC000114, AC005722, AC006046, AL035593, AC006552, AC009802, AL034406, AL109654, AL121757, AL031280, AC006046, AL035593, AC006552, AC009802, AL034406, AL049647, AL133500, Z82205, AL022069, AF035396, AL133289, AL031672, AC007225, AC007099, Y18000, AC005532, AP000350, AL050338, AL031122, AC004853, AL031431, AC006139, AC004673, AC006011, AC005527, AC006978, AC004053, AL024507, AC007157, AF027390, AC005821, AC007313, AC005900, AC006213, AP000122, Z99496, Z74696, AC005229, M87919, AC006262, AL096770, AF003627, AC003051, AC005828, AC002487, AC002564, AC016026, AC000120, AL022397, AC002458, AC007068, AC000389, AC000377, AC004924, AC008282, AC003029, AC004645, AL049835, AF118808, AC006050, AL078639, AC010200, AC007207, AC005740, AL096701, AL117344, AC003098, AL122023, AL080285, AC002426, AC004886, Z82210, AC008168, AC005250, AC005154, AL079305, AC002122, Z98754, and AL023280. |
| HNHGG93 | 5143 | 792335 | 1 - 565 | 15 - 579 | |
| HNHGG95 | 5144 | 760386 | 1 - 399 | 15 - 413 | AC004894. |
| HNHGH02 | 5145 | 920147 | 1 - 520 | 15 - 534 | |
| HNHGH20 | 5146 | 959499 | 1 - 391 | 15 - 405 | |
| HNHGH42 | 5147 | 713036 | 1 - 418 | 15 - 432 | AA488395, AI580652, AW269488, H88666, AA491814, AA177061, AI499938, AI184226, AI376100, AI921649, AA581903, AW406659, AI589230, AW088202, AA448231, AA452563, AW238278, AW103758, AW261871, AW406162, AL119691, AI887483, AA503258, AA469451, AI859251, F29989, AW276827, AL046409, AI471543, F17555, AI889923, AI053790, AI567674, AI499181, AA503284, AI679045, AA493708, AL138265, AI345518, AA654979, AI471481, |

AW265385, AI299050, AI510838, F32808, AA074130, AA649642, AW438643, AI371070, AI287451, AW300625, AI890923, AA515051, H00934, AA100599, AA569471, AI358229, AI249997, AI754955, AA482711, AI284640, AW193432, AW193265, AI344844, AI688846, AI200051, AA133333, AI334443, AI744827, T28550, AI053672, AW276817, AI341664, H91305, AI561255, AW029038, AA515905, AA634227, AI061334, AA372478, AI708009, AI281881, AW162049, AI345654, AI343137, AI929531, AI613280, AI053429, AI224093, AA669840, AI365988, AA457592, AW406755, AW080134, AW302013, H40410, AA613227, AI349850, AA343007, AI350211, AA350859, AW338500, AW173651, AI679132, AI537955, AW088058, AA228420, AI339850, AI469003, AI266576, AI375710, AI358571, AW303876, AA917683, AA652523, AI370878, AI133636, AI431303, AW265393, AA133406, AI962050, AA825455, AI270476, T07451, AW074059, AA507547, AI379719, AI041412, AW303196, AW339568, AI286356, AW274349, AI283911, AI049634, AI356904, AI039790, AI475569, AI963720, AI262909, N25296, AW338086, W95841, AW023270, AI564284, AI291268, AW166815, AI291124, AA670468, AA714453, AA515224, AI871722, AA098993, AA468131, AI623563, AW408717, AI619997, AI830390, AW440836, AW301350, AA130647, AI625244, AI251002, AA364224, AI801591, AL048925, AI792287, AI282832, AI471462, AI270117, AI801600, AA713815, AA493219, AI357551, AA579063, AA362573, AI917271, AI654529, AA452744, AI091495, AA610491, AA806796, AA252763, AW022379, AI570261, F18974, AA702023, AW168342, AW406447, AA630030, AA553465, AA126051, AA126035, H41319, AW102955, AI453383, AI160582, AA679514, AI305547, AI219406, AW340844, W79504, AI368256, AI689019, AW117750, AA664535, AI340453, AW089810, AA502155, AW104748, AA594145, AI364020, R98967, AC002375, U18399, X55931, AC006271, AC005231, AL136504, AL031668, AL096791, AL031680, AF015160, U14700, AC005037, AC006064, U18396, AF023460, AF077058, Z68284, AC006132, U14719, AC005288, AC007435, AC005618, AC004974, AC005520, AC004019, D83989, U67211, AF015170, X75335, AF015150, U18392, Z79422, Z94721, U47924, AL035417, AF129756, Z31005, AC005043, U18387, AC010349, X53550, AC007751, AC005696, AC035086, AC004263, AL096701, AL133448, U18398, U57006, AF039907, AC004098, AL133246, AC004263, AL096701, AL133448, U18398, U57006, AF039907, AF015158, AL021154, U57009, AL022724, U18394, S75201, AC005911, AC006312, U18391, X55925, U18393, I51997, AF109907, U18390, X55932, X55922, AL135783, L48472, Z22650, AF015149, AF001549, U57007, AF015166, AC006116, AC004000, AC007666, AC005776, AC007092, AC004087, AC004876, S75337, AP000113, AC005670, AC007684, AC008082, AP000504, AL031123, AC005913, Z81369, S77605, X55926, AL079295, Z93241, AC007421, U18395, U57008, AP000568, AC003691, U14713, AC004030, AL121578, AL078593, AF017104, AC004453, AF015153, AF207550, AC008071, AF015156, AF020503, AC005209, U67221, AL022476, AF015167, AC005330, AL109798, AC004531, AC016831, U57004, AP000513, AC002377, Z93023, AC004383, AC002126, AC005324, Z98257, AC006459, AC003684,

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| HNHGI135 | 5148 | 707336 | 1 - 422 | 15 - 436 | AP000555, AL031577, X55928, Z97635, AF053356, AF178030, U67801, U14717, AC006111, AL031584, AC004987, AC006157, AC003001, AL031774, X54175, AC007538, AC006040, AC007541, X54180, Z81308, AC005300, S70707, X55924, AL035072, AC006273, AC007455, AF134726, AC000159, Z49769, AL096771, AF015155, X54179, AP001172, AL031662, AC000052, AC002041, AL109657, AC004861, AL132641, AC009516, A39972, AC007238, M87909, AC004686, AC004144, AL117329, Z82244, AC003035, AC007226, U14695, U02532, AJ003147, AC006511, AC004209, AC005694, AL121653, AC004814, AC003954, U14702, Z98048, Z97200, AC008039, AL033543, AC005821, AL020994, AL049830, AC007038, AC007298, AC005529, AL034420, AL110292, AC004232, Z69666, AC004773, AC006011, AC008014, AC005379, S70694, U95740, AC006213, AC002549, D25272, AF015151, AP000552, AC005527, AL035696, AC005378, U80017, AL008709, AL096794, AC004925, AL031848, X54181, X54178, AF015162, U14716, X54176, AC006948, U95742, Z84484, AC006241, AC005184, AL021940, AC004832, AC005226, AC006065, AC004931, AC004613, M87919, AC005682, AC002565, and AC004695. |
| HNHGI79 | 5149 | 775218 | 1 - 307 | 15 - 321 | |
| HNHGI81 | 5150 | 576279 | 1 - 418 | 15 - 432 | |
| HNHGI03 | 5151 | 968076 | 1 - 309 | 15 - 323 | |
| HNHGI09 | 5152 | 625624 | 1 - 394 | 15 - 408 | AA847508, AI040051, AI499954, AW337526, AA654874, F24728, AA541532, AA378489, AW407632, AA745628, R99076, AI653783, AI421755, AI915081, AW002831, AL045476, AI345123, F24745, AA059247, H86546, H85032, AA613624, AA017169, H91062, AI358557, N90460, AA804187, AI431513, AA640563, AA847427, AA862075, AI733523, AA747375, T51436, AI380617, AI032411, AI801479, AA626632, AI440037, R99144, Z93017, AF196779, AC005363, U02068, AC004841, AL023807, Z97183, AC006057, AL035581, D86995, AC004943, AC004796, AL008715, AC005102, Z82244, AF053356, AP000555, AP000512, AL049569, AL022476, AL009181, AP000115, AC005899, AC003108, AL031587, AC005393, AC004148, AC002551, AL022721, AL109952, AC006486, AF003626, AF134726, U95742, AC008372, AC005666, AC007537, Y18000, U02057, AC007216, AF207550, AC004000, I.78810, AC005409, AC004531, AF196970, AC005071, U91323, AL035659, AC002472, AC004832, AC006312, AC005535, AC034590, AL050337, AL022328, Z98044, M84472, AC007363, AC007055, M89651, AF111168, AC005971, AF205588, AP000358, AC006505, AC006468, AL139054, AC000039, AL031228, AC008044, U37355, U37357, AL008718, AL034394, AL117694, AF075098, AC003110, AP001065, AP000359, AL031255, AC005746, Z97053, AC005081, AP000076, AC005412, AC003043, AC002430, Z85987, AP001053, AC004552, AL022315, AC005920, AC005996, AL109827, U34879, AC007637, AF047825, U96629, AC005529, AC007384, AF176815, U80460, AL049780, AC005377, AL031432, AB001523, AP000289, M30688, AC005225, AL034418, AC005911, AC006011, AC006597, AC004491, AC006254, AC007934, |

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| HNHGJ20 | 5153 | 668916 | 1 - 384 | 15 - 398 | AC004752, AC004985, Z69705, AC001228, AL033527, AC004486, AC007676, AC005280, AL030995, AF001550, AP000692, AL096791, AL022323, AC007226, AC004686, AL023553, AP000348, AC005725, AP000042, AP000110, AC004876, AC007376, AC002039, AC005695, Z98742, AC002416, AL080243, Z98304, AC000075, AC004754, AL034402, AC007225, AC005011, Z68276, AC002400, AC004400, AL049795, AC004975, AL109623, U47924, AB012113, AJ003147, AC004448, AC004254, AL133245, Z96074, AL049872, M37468, AL024498, AP000257, AC005399, AP000088, AC004159, AC002365, AC005871, AC004263, Z83822, AC002316, AC002990, AL031659, AC009330, AC005015, AC005229, AL022311, AC007435, AP000353, AF001552, Z83844, M84371, AC005913, AC005752, AL031230, AC005874, AF134471, Z83843, AC005378, AC004659, AL021155, AC000025, AL132712, AL035697, AC007421, AL031657, AC008009, X54486, AP000350, AC003002, AC004828, AC019014, and AL034429. |
| HNHGJ28 | 5154 | 686733 | 1 - 309 | 15 - 323 | AL022341.<br><br>AA724689, AI699833, AA433894, AA314522, D25249, F29184, AA296881, AA326270, AI791913, AI792133, AI821714, AI611569, AA663201, AI340641, AA501649, AI668679, AI734264, AA039512, AA063546, AA515728, T86545, AW407371, AI335995, AI821785, AA838190, AW304580, AA547947, AW029515, AA933776, AA039511, R44623, AI354388, AI700000, R57956, AII133566, AI420028, AA595499, AA169247, AA527838, AC006126, AC005081, AP000555, Z84469, AC005261, AC006538, AP000102, AC002316, AC004799, AC005409, AC005736, AL031584, AC006511, AC004812, AF045555, AC007227, AL096701, AC003101, AL133245, AC007364, AB023049, AC004386, Z85986, AC000353, AF109907, U91326, AC005004, AC004491, AC007011, AF196779, AC010205, Z95152, AC005071, AP000512, AC016026, AC005046, AC004876, AC004813, AL109939, Z84483, AL022312, U07563, AC004381, AC002369, AL022315, AC007842, AC004966, AC007536, AC005620, AC006084, AC006011, AC002037, AL049830, AC002253, AC005829, AL022165, AL008721, AC004150, AL133485, AC003007, AC002470, AC002425, AL031311, AL121655, AL008633, AC005037, AP000104, AL023807, AL008726, AC007707, AI021707, AL031594, AC002059, AC005800, AC005899, Z83840, AC004890, AL136295, Z95115, AC006960, AC005488, AP000558, AC005280, AL009179, AF053356, AC004031, AC004526, Z74739, AJ003147, AC006088, AB004907, AC005057, AL135744, AC003037, AL049839, AC004953, AC016025, AL049643, AC006449, AL008723, AP000353, AC005102, AC006071, AL022313, AC002347, Z93930, AC002544, AP000251, AC004030, AF165926, AC004765, AC006480, AC005786, AP000030, AP000211, AP000133, AL021579, AF047825, AC007225, AL133353, AP000690, AC005523, AC005598, AC005722, AC002073, Z98051, AF064861, Z84718, AC002301, AC005231, AC002400, AL122020, U47924, AC006210, AC004854, AL008582, AL049795, Z82215, AL049757, AC004858, AC004382, AC004531, AC009516, AC007057, AL117328, AC006468, AF196970, L44140, Z97989, U85195, AC004019, AC007731, AC004821. |

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| HNHGJ39 | 5155 | 850088 | 1-456 | 15-470 | |
| HNHGJ65 | 5156 | 750269 | 1-405 | 15-419 | |
| HNHGJ81 | 5157 | 777958 | 1-616 | 15-630 | |
| HNHGK05 | 5158 | 935525 | 1-308 | 15-322 | AF064862, and AF064865. |
| HNHGK24 | 5159 | 783674 | 1-426 | 15-440 | |
| HNHGK70 | 5160 | 728593 | 1-409 | 15-423 | AA633727, AL042361, AA429543, R54767, AI880143, W03215, AA317624, AA703958, AA703747, R96964, H80600, AA491063, AA601475, AA603184, AA412382, T66045, AA491139, AI214163, AA083243, AI880175, AA211922, AA393354, AW264118, AA077800, H29782, AC004987, AC004916, AL133216, AC006328, and AF109718. |
| HNHGN17 | 5161 | 663923 | 1-321 | 15-335 | |
| HNHGO21 | 5162 | 670955 | 1-276 | 15-290 | |
| HNHGO65 | 5163 | 750267 | 1-119 | 15-133 | |
| HNHGO68 | 5164 | 732370 | 1-363 | 15-377 | |
| HNHGP08 | 5165 | 859964 | 1-106 | 15-120 | |
| HNHGP31 | 5166 | 698047 | 1-528 | 15-542 | |
| HNHGP32 | 5167 | 699292 | 1-434 | 15-448 | |
| HNHGP40 | 5168 | 916551 | 1-428 | 15-442 | |
| HNHGP73 | 5169 | 934446 | 1-865 | 15-879 | F24281, AC005180, AC004178, AL035542, AL035086, Z95114, AP000305, AC005324, AP000047, AP000115, AL030996, and AL109865. |
| HNHGP83 | 5170 | 780328 | 1-546 | 15-560 | |
| HNHGQ02 | 5171 | 920146 | 1-433 | 15-447 | |
| HNHIGQ25 | 5172 | 678151 | 1-434 | 15-448 | |
| HNHGQ28 | 5173 | 859965 | 1-433 | 15-447 | |
| HNHGQ49 | 5174 | 573340 | 1-459 | 15-473 | AC005191 |
| HNHGQ79 | 5175 | 562748 | 1-1013 | 15-1027 | AI362442, AW131356, AA533545, AW023111, AA714110, AI251429, AA947369, AI921296, AI338117, AI926706, AA610233, AL109827, Z85987, AL049636, AP000096, AL133245, AC005082, AC004013, AC005071, AC005324, AC005484, Z84480, AL023575, AC004797, AP000240, AJ010770, AC005102, L44140, AL031667, AC004149, AC004647, |

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| | | | | Z83838, AC002472, AC007566, AC003664, AF064861, AF196779, AC005225, Z99716, AC004087, Z84476, AC004655, AC005939, AC004791, AL121653, AC002350, AL035405, AC005488, AC005089, AL078581, AC005057, AL008631, U95742, AC005512, AP000557, AC006965, AC006511, Z98048, AC007216, AC005031, AC004477, AC005231, AC009248, AC007666, AL049766, AL136295, AC005295, AC002558, AC005291, AP000502, AC005678, AC004526, AC004019, AL096761, AC007686, AF003626, AL022316, Z82214, AL023553, AC006960, AL035398, AC005920, AC002041, AC005520, AC005412, AC005971, AC003101, AL139054, AL024498, AC004000, AC000004, AF134726, AC005778, AF001549, Z98304, AL022334, AC007565, AL031730, AC004656, AC003690, AC005529, X55448, AC006974, AC000052, U80017, AC002991, AC006064, AC006077, AC004686, AC009516, AC005015, AL031005, AC006597, AC004805, AL109754, AL033527, AC005722, AL035458, AC002477, and AC002400. |
| HNHGR35 | 5176 | 1 - 374 | 15 - 388 | |
| HNHGR43 | 5177 | 1 - 330 | 15 - 344 | |
| HNHGS34 | 5178 | 1 - 422 | 15 - 436 | Z68885, and AL117391. |
| HNHGT37 | 5179 | 1 - 276 | 15 - 290 | |
| HNHGT51 | 5180 | 1 - 354 | 15 - 368 | |
| HNHGT64 | 5181 | 1 - 346 | 15 - 360 | |
| HNHGT74 | 5182 | 1 - 433 | 15 - 447 | |
| HNHGU19 | 5183 | 1 - 407 | 15 - 421 | AA985391, AW007854, AI821306, AA749351, AI159836, AW189113, AC005726, Z86090, AC005088, AF001549, AC007240, AC005562, AF030453, AC002425, AL033527, AL080243, AC005089, AP000066, Z85987, AL022165, AC004882, AC008044, AC004953, AP000347, AC008124, AC005969, AC003950, AC008040, AP000249, AP000210, AP000132, AD000684, U91322, AL022336, AC007425, AL035072, AC002302, Z75407, AL110502, AC005102, AJ251973, Z93023, AL049576, AC006111, AC007192, AC004876, AF067844, AL031295, AL008726, AC004585, AL021528, AC003071, AC009731, Z78730, AC002352, AC005399, AL022238, AC005231, AC010170, AP000501, AC002554, AC007263, and Z93017. |
| HNHGU41 | 5184 | 1 - 487 | 15 - 501 | |
| HNHGU44 | 5185 | 1 - 443 | 15 - 457 | |
| HNHGU84 | 5186 | 1 - 44 | 15 - 58 | |
| HNHGU89 | 5187 | 1 - 434 | 15 - 448 | |
| HNHGV18 | 5188 | 1 - 391 | 15 - 405 | |
| HNHGV22 | 5189 | 1 - 345 | 15 - 359 | |
| HNHGV29 | 5190 | 1 - 310 | 15 - 324 | AL020994. |
| HNHGV45 | 5191 | 1 - 414 | 15 - 428 | |
| HNHGV91 | 5192 | 1 - 388 | 15 - 402 | AL022068. |

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|---|---|---|---|---|---|
| HNHGX33 | 5193 | 496224 | 1 - 315 | 15 - 329 | AP000271, AP000104, and AF042089. |
| HNHGX40 | 5194 | 687120 | 1 - 344 | 15 - 358 | |
| HNHGX41 | 5195 | 711657 | 1 - 650 | 15 - 664 | |
| HNHGX52 | 5196 | 727175 | 1 - 425 | 15 - 439 | |
| HNHGX55 | 5197 | 683523 | 1 - 296 | 15 - 310 | |
| HNHGX83 | 5198 | 781196 | 1 - 550 | 15 - 564 | AC006079. |
| HNHGY13 | 5199 | 657253 | 1 - 397 | 15 - 411 | AL031732. |
| HNHGY17 | 5200 | 663921 | 1 - 405 | 15 - 419 | |
| HNHGY18 | 5201 | 859951 | 1 - 409 | 15 - 423 | |
| HNHGY19 | 5202 | 835531 | 1 - 422 | 15 - 436 | |
| HNHGY26 | 5203 | 859949 | 1 - 438 | 15 - 452 | |
| HNHGY29 | 5204 | 690666 | 1 - 429 | 15 - 443 | L34981, Z68275, AL117391, and L33995. |
| HNHGY42 | 5205 | 713797 | 1 - 409 | 15 - 423 | |
| HNHGY47 | 5206 | 720360 | 1 - 400 | 15 - 414 | T02826. |
| HNHGY79 | 5207 | 775209 | 1 - 405 | 15 - 419 | |
| HNHGY86 | 5208 | 785516 | 1 - 238 | 15 - 252 | |
| HNHGY91 | 5209 | 840129 | 1 - 419 | 15 - 433 | |
| HNHGZ36 | 5210 | 708131 | 1 - 71 | 15 - 85 | |
| HNHGZ63 | 5211 | 742594 | 1 - 522 | 15 - 536 | |
| HNHHA21 | 5212 | 496227 | 1 - 374 | 15 - 388 | |
| HNHHA32 | 5213 | 669915 | 1 - 328 | 15 - 342 | AC004819. |
| HNHHA37 | 5214 | 708709 | 1 - 188 | 15 - 202 | |
| HNHHA68 | 5215 | 753047 | 1 - 613 | 15 - 627 | |
| HNHHA91 | 5216 | 790198 | 1 - 271 | 15 - 285 | |
| HNHHB11 | 5217 | 964993 | 1 - 147 | 15 - 161 | AL136297. |
| HNHHB12 | 5218 | 970719 | 1 - 363 | 15 - 377 | AW088875, AW090733, AW089149, AI241940, AI364268, R41807, H06383, AW016452, AA598689, AI863108, AA599060, AI091148, AI693507, AI424991, and Z38240. |
| HNHHB24 | 5219 | 677224 | 1 - 351 | 15 - 365 | |
| HNHHB64 | 5220 | 702697 | 1 - 766 | 15 - 780 | N90568, AI554312, AP000365, and AP000548. |
| HNHHC12 | 5221 | 967088 | 1 - 290 | 15 - 304 | |
| HNHHC17 | 5222 | 860117 | 1 - 318 | 15 - 332 | |
| HNHHC29 | 5223 | 713800 | 1 - 359 | 15 - 373 | AA663387, and AA679164. |
| HNHHC33 | 5224 | 699291 | 1 - 172 | 15 - 186 | AL080239. |
| HNHHC36 | 5225 | 707340 | 1 - 218 | 15 - 232 | |
| HNHHC46 | 5226 | 719068 | 1 - 240 | 15 - 254 | |
| HNHHC58 | 5227 | 736069 | 1 - 227 | 15 - 241 | |

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| HNHHC83 | 5228 | 781197 | 1-425 | 15-439 | |
| HNHHD35 | 5229 | 707338 | 1-423 | 15-437 | |
| HNHHD61 | 5230 | 741837 | 1-405 | 15-419 | |
| HNHHD67 | 5231 | 751663 | 1-305 | 15-319 | |
| HNHHD82 | 5232 | 779893 | 1-419 | 15-433 | |
| HNHHE07 | 5233 | 953408 | 1-364 | 15-378 | |
| HNHHE48 | 5234 | 630223 | 1-307 | 15-321 | |
| HNHHE63 | 5235 | 745100 | 1-281 | 15-295 | |
| HNHHE80 | 5236 | 774041 | 1-301 | 15-315 | AL079342. |
| HNHHF01 | 5237 | 916546 | 1-306 | 15-320 | |
| HNHHF33 | 5238 | 698502 | 1-249 | 15-263 | |
| HNHHF51 | 5239 | 698490 | 1-384 | 15-398 | |
| HNHHF56 | 5240 | 496204 | 1-349 | 15-363 | AC006427. |
| HNHHF58 | 5241 | 859946 | 1-419 | 15-433 | |
| HNHHF63 | 5242 | 745095 | 1-361 | 15-375 | |
| HNHHF79 | 5243 | 775205 | 1-421 | 15-435 | AI287766, AI124798, AA535216, AA715173, AA715075, AA829056, I150970, AI783911, AI560085, AI583532, AI754286, AA350886, AA598731, AW438850, AW438662, AW302048, AA568314, AA828844, Z97054, AC005874, AF134471, U96629, AL024507, AC007056, AP000352, D87675, AL109798, AC009510, AL133500, AC009946, AC002302, AL022726, AL034549, AC005089, AL049569, U95742, AC005488, AP000511, AC007216, AC007199, AC005037, AC012085, AF001550, AF205588, AL008721, AP000108, AP000040, AC004554, AL034548, AP000030, AC008372, AP000116, AC003051, AC005899, AC006449, AP000089, AC010209, AC006312, AC004522, AL109758, AC007151, AC003665, AC004797, AC009516, AC016027, U63630, AC006079, AL031427, AC002492, AC004927, AF030453, AC016830, AC008072, AC005088, AC005377, Z83844, AC007637, AL035652, Z82194, AC007450, AC002477, AC006014, AC004983, AC004895, AC002463, AC003007, AC000134, Z85986, AC002476, AP000501, AC005952, AC002352, AL139054, AF091512, AC004686, AL035420, AP000101, AL133245, AC007314, AC008394, AF053356, AF124731, AL132642, AC004675, AC004662, AC005871, U91321, AE000658, AC005695, AL031737, AP000115, AL022302, AC007263, AC006013, AC003687, AC005191, Z95114, AC005632, AC003036, AC007227, AP000694, AC004638, AP000952, AF195658, AF088219, AC004834, AL031281, AC007283, AC005484, AC007226, AC005224, AL031985, AC004966, AC006536, AC004765, AC002554, AP000085, AC005187, AC004796, AC005829, AC005921, AC004031, AC007198, AF067844, AC005972, AC006059, AC006006, AC004777, AC005911, AC004817, AC010206, AF106564, AC005288, AC005553, AC003668, AC020663, AC008044, AC004876, AL022400, AC005520, AC005969, AC006571, Z82215, AL021878, AF118808, AC006509, AJ003147, Z95152, |

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|---|---|---|---|---|---|
| HNHHF96 | 5244 | 796402 | 1-315 | 15-329 | AC005757, AC000041, AF111168, AL022311, AL050318, AC005291, AC000025, AC002400, AC005529, AC004828, AL121892, AP000704, AP000264, AL050308, AC002316, AC005527, AL109963, AC005250, AP000045, AJ011930, AC000111, AL117339, AC005837, U95739, AL022318, AC004707, AC007566, AC004583, Z83822, AL031599, AC005482, AP000141, AC005231, AC004974, AP000035, AC005082, AL049758, AL035089, AC007429, AL022156, AC004685, AL035587, AL050332, AF207550, AD000092, AC005086, AP000356, AL050307, AP000113, AC005048, AP000313, AC005752, AL035249, U47924, AC004672, AC005409, AC004051, AL117337, AC004622, AL031255, AF111169, AC006205, AC005186, AP000553, AL008719, AC002558, AC004000, AL031659, AC002312, AL031311, AL049851, AC004996, AC009399, AL020997, AL031685, AL135744, AL031228, AC007388, AL079342, AC006160, and AC006538. |
| HNHHG47 | 5245 | 720361 | 1-300 | 15-314 | |
| HNHHG50 | 5246 | 724411 | 1-399 | 15-413 | |
| HNHHG65 | 5247 | 750266 | 1-237 | 15-251 | |
| HNHHH13 | 5248 | 657251 | 1-254 | 15-268 | |
| HNHHH42 | 5249 | 713796 | 1-357 | 15-371 | |
| HNHHH57 | 5250 | 734793 | 1-382 | 15-396 | AI678676, AI821937, AI754286, W45073, H05449, C75526, AA272259, C75403, AF001549, AC006101, AC006111, AC006449, AC005399, AC004703, AC005736, AL031230, AC004030, AC007731, Z93023, AC005500, AL022476, AC005576, AC004030, AL132777, U62293, U63721, AC004878, AC006515, AL024498, AC003109, AC007564, Z95114, AC005089, AC006130, AC003962, AL031228, AC005037, AC005180, AL049694, AL049830, AC005829, AI133500, AC006312, AC005288, Z93930, AC005537, AC004889, AC003012, U91318, AC004887, AC007384, AL022336, AL049776, AC004895, AL139054, AL121603, AP000133, AF111168, AL035086, AC005071, AJ246003, AC006960, AL121658, AC004832, AF003528, AP000512, AF031076, AC004859, L44140, AC006241, AC006030, AF067844, AC005015, AL080243, AC005914, AC002316, AF118808, AL020997, AC005520, AL021391, AP000300, AF031078, AL121653, AC005562, AL031432, AF030876, AC005911, AL022721, AL024507, AP000694, AF064861, AC004491, AC005088, AL079342, AC005094, AP000355, AC005206, AP000116, AC004216, AL031295, AC007363, AC005412, AC005516, AL008718, AL023284, AC004638, AP000555, AC007057, AL049872, AL031905, AC005358, AC006417, AC005971, AC006071, AC004098, AC004967, and AL133445. |
| HNHHI10 | 5251 | 964659 | 1-227 | 15-241 | Z97205. |
| HNHHI28 | 5252 | 859941 | 1-415 | 15-429 | AL109657. |
| HNHHI34 | 5253 | 706699 | 1-400 | 15-414 | |
| HNHHI36 | 5254 | 708132 | 1-427 | 15-441 | AI580362, AA676819, AA677954, AI831913, AI628458, and AL031123. |

| HNHHl65 | 5255 | 750263 | 1 - 374 | 15 - 388 |
|---------|------|--------|---------|----------|
| | | | | AW238278, AL048925, AA454177, AW023672, AA493708, AL119691, AA101689, N23896, AI567076, AA515909, R24887, AI801482, AI246796, AA579179, AI281881, AW407578, AW341900, AW270270, AA503473, AI371249, AA613232, AI733856, AW062724, AW167372, AW131249, AW419262, AA630362, AW072587, AA507824, AI860020, AI061313, AI355206, AA55924I, AI184226, AA483223, AA774780, AA098993, AA720702, AA578481, AI589230, AA587991, AA642060, AI056177, AI279417, F34498, AI279037, AI933714, AI148277, AI733755, AA326441, AA614163, AA613345, AA446657, AW162489, AA805846, AA719073, R77905, AA847499, AW406162, AL120687, AL122023, AC007676, AL021154, AC007684, AC006285, AP000556, AC004167, AC006480, AL022313, AL049553, AC012627, AC006538, AC004526, Z15025, AL121757, AL121603, AL133371, AC002070, AL035089, AL096791, AC006312, AC000026, AL035079, AC005358, AC003029, AC004638, Z95152, AC002059, AL031667, AC055736, AC005089, AC007537, AC003046, AC000353, AL020997, Z74739, AC004020, AC007055, AC004817, AL008718, AP000151, AP000090, AL109628, AC007226, AC007277, AJ003147, Z75887, AP001038, AL008583, AC000003, AC002525, AL135744, AL021808, AP000962, AL035249, AC005667, AC007066, AC007546, AL049713, U07563, AL049776, AC006511, AC004583, AP000134, AP000212, AC005102, AC005071, AC005940, AC031431, AC005520, U62317, AC005971, AL021392, AC005164, AC005921, AC004024, AC010170, AC005375, AC007014, L78833, AL080317, AP000260, AL035458, AC005288, AC005808, AL049636, X16873, AB023049, AC005562, AL008582, AC005411, AL049830, AC000090, U95740, AC005548, AL080242, AC006006, AF196969, AL035659, AF053356, AP000281, AC000081, AC006241, AC005081, AC004991, AC004598, AC004019, AC007191, AF001550, AL035450, AC005015, AC005837, AF165926, AC005409, D87675, AC004675, AC006077, AC002544, AC007993, Z93017, AP000252, Z83843, AP000036, AC004605, AP000039, AL031733, AC002310, AF196972, AC005839, AF111168, AC005527, AP000302, AC002365, AC006515, AL031390, L78751, AL031673, AC005694, AL109865, AP000557, AC007021, AC008115, AF088219, AC007227, AC002288, AC007371, AC006252, AC003682, AC005585, AC004875, Z99755, AC004887, AC004655, AC006548, AC005193, AC006013, AL035420, AC005484, AC002470, AC004386, AC006441, AC004913, AL132712, AL022318, AC004079, AC005479, AC006539, AL080243, AL031296, AC006251, AL022320, AC002565, AC004878, AC003982, AL031282, AP000501, AB003151, AL121658, AF139813, AP000115, Z85996, AP001053, AC007664, AF031078, AC000379, AC007917, AL034549, AC007510, AC004021, AC003081, AL021918, AC005913, AF134726, AC004408, AF030876, AC004381, AC005046, AC006115, AC006984, AC007292, AC002036, AC008101, AC004112, AC003663, AC002119, AC006130, AC005291, AC006101, AC006315, U85195, AC009044, AC005914, AF003626, AL021807, AF124523, AC005202, AC004797, AC002477, AP001054, AL049539, AP000356, AC016027, AC006139, AC002395, AC005529, AC005841, AC004972, AC005535, AL031589, AL034343, AC005284, AL022329, and AJ246003. |

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| HNHHI72 | 5256 | 510619 | 1 - 716 | 15 - 730 | AA434086. |
| HNHHHK06 | 5257 | 935517 | 1 - 418 | 15 - 432 | AC005280, AL109628, AC006006, and AC004686. |
| HNHHHK39 | 5258 | 937598 | 1 - 400 | 15 - 414 | |
| HNHHHK46 | 5259 | 718081 | 1 - 435 | 15 - 449 | |
| HNHHHK62 | 5260 | 741835 | 1 - 214 | 15 - 228 | |
| HNHHHK74 | 5261 | 765601 | 1 - 324 | 15 - 338 | |
| HNHHHK84 | 5262 | 781980 | 1 - 358 | 15 - 372 | |
| HNHHHK93 | 5263 | 792326 | 1 - 548 | 15 - 562 | T12412, Z73967, and AL031985. |
| HNHHHL22 | 5264 | 674617 | 1 - 321 | 15 - 335 | |
| HNHHHL70 | 5265 | 757201 | 1 - 339 | 15 - 353 | |
| HNHHHL74 | 5266 | 765598 | 1 - 212 | 15 - 226 | AA657808, AA742850, AC006561, AC004751, AL021367, and AC005060. |
| HNHHHL92 | 5267 | 756587 | 1 - 249 | 15 - 263 | AC002288, AC002350, AC005076, AC007052, and AL049569. |
| HNHHHM10 | 5268 | 964656 | 1 - 324 | 15 - 338 | |
| HNHHHM17 | 5269 | 661964 | 1 - 153 | 15 - 167 | |
| HNHHHM25 | 5270 | 678144 | 1 - 272 | 15 - 286 | |
| HNHHHM28 | 5271 | 575451 | 1 - 450 | 15 - 464 | AI860558, AI963420, AI683827, AA342712, H74211, AA497013, AA342852, I173133, AA587516, H91062, AL120897, AA176978, AA847499, AA808173, AI243789, AI284045, AA477103, AI216799, AI471691, F09180, AA653618, AA488746, AA491882, T06828, AA224902, AI357288, AC005899, AC002492, AC009247, D87675, Z95152, AC004257, AL031282, AC009516, AC005779, AL022323, Z98036, AC003684, AC002394, AC005399, Z83840, AC007664, AC007263, AC004491, AF111168, AJ006996, AC004887, AC005736, AC002404, AL031428, AC005632, AC006023, AC002119, AC006538, AC005914, AC004024, AC003109, AP000356, Z93016, AJ246003, AP000097, AC006973, AC006111, AL122020, AC007371, AL021394, AC006116, AL050348, AC003029, AC004797, AL049869, AC005209, AC007546, AL022326, AL008582, AL078477, AL049776, AC006312, AC006285, AC005907, AC002350, AC007225, AC004019, AL035683, U95742, AC006487, AL121655, U91326, AC006064, AC006120, AC005067, AP000557, AP000011, AL096791, Z69917, AC004827, AC005785, AC005562, AC007731, AC004890, AC003957, AC006014, AC005089, AC000393, AC007216, AC004668, Z95114, AC004686, AL008629, AC002546, AC003663, AC005324, AF200465, AP000505, AC004148, AC006480, AD000092, AC005962, AL034379, Z15025, AL031577, AC004675, AL009181, AL133243, AP000201, AC006468, U91318, AC007748, AL031311, AC005822, AL133448, Z86090, AL109654, AC005411, AL050307, AF129756, AL008729, AL021807, AC005306, AF205588, AL121658, AC006360, AC000134, AC007052, Z68756, AC000052, AC004999, AC004819, AL031594, U80017, AC004771, AC006050, AL078634, AC004552, AL049830, AC004938, AC004757, AC004905, AL049759, AC004448, Z70280, AF042484, AL079340, AC007192, AC005480, AL109628, AL109821, AF088219, |

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| HNHHIM35 | 5272 | 706667 | 1 - 320 | 15 - 334 | AL034429, AC007686, AC003108, AC005619, AL035450, AL021578, AC006443, AC004841, AC006449, AL022312, AC005049, AC003007, AC002316, AC002430, AC005081, AC002477, Z98050, AP000241, AC008116, AC005378, AP000556, AC005722, AF124731, AC002472, AL034417, AL031291, AP000141, AP000346, AL031289, AL035695, AC004253, AL023553, AC007395, Z93244, AC006277, AC006055, AC006441, AL049709, AL031680, AC004531, AC004259, AC005500, AF045555, AP001054, AL049766, AP000359, AC002425, AC005488, AC005900, AL021453, AC007030, AL008735, AL109627, AL121769, and AL049694. |
| HNHHHM37 | 5273 | 708715 | 1 - 147 | 15 - 161 | Z93021, AC007446, and AC006314. |
| HNHHHM52 | 5274 | 727166 | 1 - 290 | 15 - 304 | |
| HNHHHM55 | 5275 | 694373 | 1 - 528 | 15 - 542 | AA082778, AI708218, and AP001058. |
| HNHHHM70 | 5276 | 757202 | 1 - 245 | 15 - 259 | |
| HNHHHM80 | 5277 | 880776 | 1 - 319 | 15 - 333 | |
| HNHHHN03 | 5278 | 920129 | 1 - 452 | 15 - 466 | |
| HNHHHN07 | 5279 | 953393 | 1 - 347 | 15 - 361 | H74218, AW023111, AA936718, AA364006, AI440117, II29914, AA581927, AA523695, AI266028, AA486542, AA788592, AI493583, AA018923, AW304536, AI310464, AA772704, H73902, AA502207, AA507684, AI912401, AA610233, AI368732, AL133246, AL117344, AC004491, AL031659, AL049631, AC003071, AC005303, AL035455, Z98749, AL022396, AC005823, AL031904, AC004686, AC004976, AL035496, AP000257, Z82176, AC002126, AC003684, AL031311, AC018769, AC007066, AL118516, AP000098, AC007878, AL049569, AC006509, AC006449, AC005940, AC005082, AC003029, AP000556, AL078581, AC002470, Z93241, AL080243, Z85996, AL135744, AC004622, AC004883, AC006581, AC007687, AC020663, AL121653, AC005005, AC004815, AP000194, U91321, Z98304, AC005057, AL133243, AC005874, AF134471, Z84476, AF124523, AC004983, AL139054, AP000555, AC004991, Z83844, AC009247, AC005089, U96629, AC009509, AC002477, AP000022, AC007450, AL022398, Z84474, AF196971, AL031673, AC005914, AF047825, Z93784, AC004525, AC004033, AL022324, AL022323, AP000163, AL049843, AC004967, AC003007, AC007919, AC005231, AC004134, AL034420, AC002040, AC007773, AL121825, AC007637, AL049776, AC002045, AC002300, AP000115, AC006077, U80017, U96409, AC002301, AL035457, L44140, AC005274, AC006205, AC005377, AD000092, AC004878, AC006302, AC007731, AC005829, AC004859, AC005031, AP000113, AP000045, AC004834, Z82215, AC006455, AF111168, AC006312, AC008033, AL049709, AC005899, AC002072, AC005378, AL031587, AL031291, AL031230, M55987, AL035086, AL022318, AL049849, AC010206, U29874, AC007051, AL021391, AC000035, AL049869, M89651, AC005412, AC005666, AF038458, AC007386, AC003051, AF036405, AC004922, AC005102, AC004914, Z83838, AC004408, AL109865, AL031432, AC006388, AC002395, AL031680, AC004813, AP000966, AF165926, AC006071, AP000313, AF053356, AC004382, |

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| HNHHN11 | 5280 | 1 - 337 | 15 - 351 | AC005538, AC004876, AL109758, AL009181, AC005300, AF134726, AC004890, AC006450, AC004882, AP001053, Z93017, AC004821, AL035659, AC006539, AP000050, AC004999, AL022315, AL132777, AC002381, AC005399, AL034553, AC006538, AC005800, AC002504, AC005837, Z84487, AL035422, AC000025, AC005409, AC006480, AP000117, AC006536, AC005288, AC004655, Z95114, AC007129, U91323, AC004013, AC005071, AC005529, AC005775, and AL034402. |
| HNHHN19 | 5281 | 1 - 333 | 15 - 347 | |
| HNHHN31 | 5282 | 1 - 104 | 15 - 118 | |
| HNHHN62 | 5283 | 1 - 312 | 15 - 326 | AI733700, AI733701, AI191504, AI191500, AI792423, and AI761827. |
| HNHHN93 | 5284 | 1 - 345 | 15 - 359 | AL049845. |
| HNHHO08 | 5285 | 1 - 339 | 15 - 353 | |
| HNHHO15 | 5286 | 1 - 331 | 15 - 345 | AA345594, AI884861, AA724224, AA225100, R76290, AI671077, AA452569, AA808847, F34170, AA344768, AI537800, M78137, T94072, AA857812, AW265688, AI300818, AI310992, AA358258, H78034, AI469392, H72642, AI648514, AA668475, R06740, AA078384, AA679353, AI469140, AI199816, H44537, AL039057, AA196552, R96373, AA020882, AA313075, AA846923, AA809089, AA856815, R01209, AI419337, AI361090, AA677848, AA321010, AA705075, T08386, AL047645, AI288033, AI421950, AI368873, AA354324, AI890971, AI205783, AI859906, R70884, AW089625, AI088127, AW026305, AI285493, AA938390, AI682727, AA584862, AA630122, AI255004, AI255015, AA219349, AA230075, AA604515, T07779, AA581525, AI624800, AI052194, AI570805, AA581927, R70883, AA339749, AI037907, AA992610, AW337992, AA112924, AI538236, AA772704, AA838192, AA325742, AA324088, AW019964, AA468975, AA326330, AA093114, AI253376, AW192402, AA458534, AA197019, AI905770, AI493583, AA515631, AA629888, AI751753, AI613465, AA156551, AJ678812, AI280574, AA890060, AI860535, AI889426, R32162, AI376454, H38769, AI734155, AP000473, AC006236, AC008975, AC007556, AC005553, AL031291, AL035405, AC007546, AC007684, AL133500, AL034421, AC004829, AC007270, AL049569, AL049643, AC004655, AC002310, AL031284, AP000462, AC022517, AF060568, AB017654, AC006930, U82668, U73169, AC006323, AC004893, AL132668, AL049838, AL008721, Y10196, AC004067, AC004915, AC004878, AC006014, AC005488, AL049709, U52112, AC004531, AC004601, AC005858, AL008712, AC005288, AC006480, AC007686, AF111169, AC004230, AC004973, AL033375, AF030453, AC005088, AC005088, AP000699, AL031728, AC005005, AC005863, AP000501, AL078638, AP000227, AP000087, AL078581, AC005061, AC004941, AC005344, AL031589, U34879, AC004084, AL022398, AC003108, AL035464, AJ010598, AL121578, AC010168, AC005036, AC005808, AC005972, AF118808, AC004143, AL031905, AC006262, Z85987, Z95115, AC004844, AL096791, AC007263, AC004099, AC009509, AL034429, AC005480, AF042091, Z97053, AF134726, AC004216, AC006241, AL049563, AC005684, AP000694, |

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| | | | | AL079342, AC005377, AL031848, AC004783, AC005746, AC005587, AC007372, AC005953, AC002565, AC002551, AC006121, AC007055, AC005071, AL049837, A1122023, AC003690, AL009181, AL031659, AL034548, AL008734, AC002126, AC005231, AL034420, AC003665, AF126403, AL121877, AC005899, AC007066, AC005332, X71402, X95887, AC005086, AL008720, AD000812, Z82171, Z73964, U15177, AC005619, AL035465, X55448, AP000268, AC008150, AF157623, AC007199, AP000103, AP000033, AC000085, AL109938, AL035443, AL031000, AC004966, AL031587, AC004033, AL022162, AC004025, AL022318, Z95114, AL022319, L44140, AC002041, AC004590, AL139165, AC008041, AC006203, AC004988, AC005752, D84401, AP000241, AP000201, AC005004, AC005476, AF124731, AP000097, Z94056, Z92542, AC005585, AC004832, AC006312, AC006211, AC005157, AL034549, AC003007, AL035690, AC005099, AC004834, AL049795, AL022326, AC004552, AC006285, AC008273, AF001550, AC007731, AC005500, AL031733, AL139054, AC006948, AC001234, AP001066, AL050348, AP001065, Z93020, AC000378, AP000555, Z84487, S79836, U11297, AC006512, Z94802, AP000310, AC004985, Z49862, AC002306, AC000381, AL109801, AL023694, AL021546, AL022333, AP000116, AP000502, AL021069, AC012627, AL009051, and AL023553. |
| HNHHO49 | 5287 | 722991 | 1 - 340 | 15 - 354 | AA826320, AI569363, AA410834, AI064955, AA715814, AA508744, AW157667, AA912287, AI792566, AC004595, AC007225, AL035659, AC004805, AC005874, AF134471, AL049714, AL035089, Z84466, AL080243, AC080243, AC005358, AC002544, Z85986, AC000403, AL031588, X99832, AC007216, AC005027, AC005632, AL031591, AL049759, U52112, AC007011, AC005529, AC004551, U95742, AC004382, AC006449, AC002456, AL009181, AC004472, AC004882, AC004983, AC006117, AC006453, AC002425, Z83822, Z83845, AC002543, AF047825, AL031005, U47924, AC009479, AC002067, AP000493, AL031767, AC005606, AC003104, AC004876, AC000085, AC005666, Z99129, AC007688, AL035460, AC002468, U91321, AL049843, AL033527, AC009248, AC003098, AP000510, AC005154, AC004832, U62317, AC002349, AC005682, AC004894, AU020997, Z98044, Z98051, AC009516, AF165926, AL117258, AL031589, AC004216, AP000240, AC005231, AC005193, Z93244, AC005071, AC004859, AC007055, AC007298, AB023048, AC006013, AC004966, AL049766, AC004196, AC005304, AC002492, AC006088, AC006441, AL034555, AC002126, AC004598, AC002064, AL049869, AL021154, AC005568, AL031283, L29074, AL049631, AL031602, AL031133, AL035458, AL133448, AL049779, AF037338, AC004821, AP000558, AC005225, and AC009731. |
| HNHHO66 | 5288 | 727167 | 1 - 325 | 15 - 339 | |
| HNHHO79 | 5289 | 774038 | 1 - 311 | 15 - 325 | |
| HNHHP02 | 5290 | 920120 | 1 - 329 | 15 - 343 | |
| HNHHP04 | 5291 | 935501 | 1 - 300 | 15 - 314 | |
| HNHHP16 | 5292 | 661962 | 1 - 343 | 15 - 357 | AC005596. |

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| HNHHR04 | 5293 | 935502 | 1 - 341 | 15 - 355 | |
| HNHHR46 | 5294 | 720358 | 1 - 334 | 15 - 348 | |
| HNHHR61 | 5295 | 741830 | 1 - 311 | 15 - 325 | AL022396. |
| HNHHR93 | 5296 | 775194 | 1 - 399 | 15 - 413 | AA553367, AW452948, AA828734, and AI912090. |
| HNHHS46 | 5297 | 956186 | 1 - 671 | 15 - 685 | |
| HNHHS74 | 5298 | 765584 | 1 - 408 | 15 - 422 | AA586573, AC005036, AI.021026, AC003951, AL034551, Z83820, AC002463, Z68325, AC004062, AC004949, and AP000082. |
| HNHHS76 | 5299 | 788913 | 1 - 300 | 15 - 314 | AI541356, R29657, AA585098, T18597, AA585325, R45895, Z32822, AA585101, D53161, R28735, R29445, D57491, C15406, AI557740, Z28355, D59751, AA585155, AI557262, AI557864, R28892, D61185, Z32887, C15069, AI526140, AI541365, AI525500, AA170832, AA585439, R28965, D59436, AA585378, AA585329, R29218, D60844, AI526184, AI526078, AI557731, AA585476, D60765, D54897, R28967, R28895, AI557727, AI541205, AI541535, AI546971, C16315, AI525556, AI525316, AI541383, AA283326, AI541517, AI547250, AI546875, AI557763, D61254, AI557734, D53472, AI546999, AI526016, AI557787, C16293, AI541013, AI547039, AI557807, D55233, AI525306, D53447, C16300, AI541374, C16294, C15120, AI557084, D52835, AA585356, AI524945, AI541346, C16292, AI557718, AI546945, AI525431, AI557155, AI547196, C15762, AI557408, AI526191, AI557758, C16305, AI541523, Z30131, R29179, AI525339, AI541034, AI526194, C15737, AI557809, AI546921, AI541307, AI546996, AI540967, AI546891, AI547006, AI540903, AI557602, AI540974, D60730, C16296, AI526109, Z33559, R29177, AI525320, AI557279, AI547202, AI526176, D57186, AI541321, AA585453, AI526024, R29262, AI557808, AI526112, R29172, AI526158, D51433, C14208, AI541527, AI535639, AI535660, AI536138, D54850, AA585430, AI546829, AI557533, AI526113, AI541510, C16290, AI525856, AI557039, AI526195, D59458, AI556967, TI9407, AI547137, AI526073, AI526180, AI557264, AI546831, T41289, Z36724, AI541422, AI525656, AI526117, AA174170, AI525332, AI526187, AI525286, AA514191, AA585117, AI541515, AI547189, AJ239433, AI540920, T41329, AI541492, AI524904, AI524890, AI557799, AI524891, AI546855, AI541027, AI541345, AI557041, AI557238, C14322, AI557852, AI546828, AI541506, AI541415, AI557082, AA585434, AI526205, AI557786, C14391, AI541402, AI525114, AA585440, AI546901, AI557317, AI557285, C14723, AI525168, AI526146, AC005913, AR038762, AR038855, AR062871, A25909, Y09813, X82786, Z32836, AR054723, AL021395, X81969, AJ244005, Y16359, AF082186, D78345, D50010, D13509, AJ244004, A20702, AR062872, AR062873, A20700, A43189, A43188, AR017907, AJ244003, AC002563, X55486, X76012, AC007308, AC002470, AL031293, AC002430, and AC007384. |
| HNHHS79 | 5300 | 775192 | 1 - 359 | 15 - 373 | |
| HNHHT35 | 5301 | 707342 | 1 - 392 | 15 - 406 | |
| HNHHT55 | 5302 | 465438 | 1 - 418 | 15 - 432 | AC000093. |
| HNHHT70 | 5303 | 783033 | 1 - 180 | 15 - 194 | AI274692, T40452, F33126, AA076426, N25415, AA321595, AA975915, AI273675, AI268564, |

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| HNHHU46 | 5304 | 1 - 346 | 465395 | 15 - 360 | AW276933, AI138918, AA741020, AI371804, AI812021, AA640204, AI343078, AW341882, T76991, H13565, AF109907, AL034423, AC004491, AF038458, AC005668, AL033527, AC005740, AC004552, AC005822, AC005548, AC007546, AL109733, AF088219, AC005859, AC003959, AL035089, AL009181, AC006343, AC005082, AC005919, AC004470, AC004531, AC007388, Z98047, AC006059, AL121603, AL023799, AC005291, AP000696, AL135744, AC006996, AC007312, AC003098, Z94721, AF003626, AC004858, AP000688, AC002070, AC004967, Z98941, AC008372, AL031117, AC004841, AL035425, AL139054, AC005539, AL035695, AC005971, AP000031, AC004916, AE000658, AL109865, AC004217, Z98946, AC011311, AL035400, AC003071, AC004685, AL049833, AP000344, Z94056, AC004849, AL109963, AL021408, AL133245, AC007376, AC002381, AC007938, AC012384, AC005049, Z84469, AL080243, AF117829, AC006305, AC005800, AC002312, AJ251973, AC005412, AL031650, Z98304, AC018769, Z96074, AC005994, AL035555, AL031657, AC006441, AL023807, AL023281, Z86062, AC005670, AC005158, AC002416, Z99716, AC007878, AL049696, AC004003, AC003950, AP000516, Z98752, AC004813, AL117694, AC004583, AC004801, AL049776, AC002365, AC004522, AL049843, and Z93241. |
| | | | | 15 - 421 | AI950671, AA586656, F03525, AA829565, AI611739, AC005837, AC006285, AL121595, AL050317, AC002527, AC006088, AC005488, AC005318, AC002996, AC004942, AC005841, AF165926, AC005209, AC016025, AC005368, AC007151, AC005971, Z83840, AC005914, AC002477, AF205588, AL133382, AL049766, AP000347, AL121652, AF053356, AC006011, Z82244, AL008721, AL022345, AL049776, AL133163, AL133245, AL050318, Z99716, AL049712, AC003109, Z97053, AC006468, AC008372, AC004821, AC004408, AC005924, AL034343, AC005899, AC004854, AC005765, AC002369, AL021808, AP000692, AL109798, AL049829, AC002369, AC004601, AL049759, AC006449, AC005933, AL023807, AC004966, AC005902, AC004019, AC002352, AC016026, Z83826, AC005482, AC004526, AL034379, AL031283, AC005529, and Z95114. |
| HNHHW01 | 5305 | 1 - 407 | 859935 | 15 - 421 | Z98885. |
| HNHHW32 | 5306 | 1 - 272 | 699255 | 15 - 286 | |
| HNHHW58 | 5307 | 1 - 228 | 739288 | 15 - 242 | AA824650, AA663908, AI302974, W89152, AW338697, AL035400, AC005912, M63543, M63544, AC007227, AC004841, AC004263, AC007327, AL023807, AC007993, AC006430, AC005764, AF141309, and AC004408. |
| HNHHW61 | 5308 | 1 - 145 | 742071 | 15 - 159 | |
| HNHHW73 | 5309 | 1 - 322 | 765588 | 15 - 336 | |
| HNHIA02 | 5310 | 1 - 482 | 920094 | 15 - 496 | AL119119, C06015, T11417, D59503, D81111, D80064, C14227, D58246, C14389, D80195, AW360811, D59502, AW177440, D51799, D80164, AW178893, C15076, D81026, D80258, AW375405, D59467, C14407, D59275, D58283, D58101, D80227, D80022, D81030, D80166, D59859, C14331, D80193, D59619, D80210, D80391, D80240, D80045, D51423, D59787, D80038, AA305578, D80253, D80043, D80212, D80196, AW366296, D80188, AW360844, |

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| HNHIA16 | 5311 | 661931 | 1-411 | 15-425 | AW360817, D80219, D57483, D59610, D59927, AA514184, D80378, AA514188, D59889, D80024, D80302, AI577774, D80439, AW177501, D80269, AW177511, C14298, D80247, D50979, D80522, AA305409, D80251, D80168, D80241, D80014, AI577751, DR0268, D80366, D51022, C14429, D80248, D50995, C14014, D59695, D51060, F13647, AW360841, D51103, D80133, AA514186, D80157, AW179328, AW352117, D5229l, D59653, AW360834, AI535686, D45260, AW375406, D51759, D59627, AW378534, C03092, T03116, AA809122, AW179332, AW377672, AW378539, D80949, AW179023, AW178905, D51079, II67866, T03269, AI525923, AW377671, H67854, AW378533, C05695, C75259, AW378532, AW369651, AW352171, AW178907, D59317, AW352170, AI525920, AW177505, D59373, AW178906, D51250, AW377676, AW179024, AW178775, D59551, AI525917, T48593, AW177731, AW178909, AW177456, C14973, AW378528, AW178762, AW179019, C14344, D51221, AW179329, AW179018, AW178908, D59474, Z21582, AW178754, D60010, D60214, AW179020, AW352158, AI525227, AW178980, C14046, AI910186, AW177733, D45273, C14957, AI525235, AW179012, AI525925, AW352120, AW378525, AI525242, AW179004, AI525215, AW177734, AW367950, D51213, AW178986, AW178914, AW178774, AW176467, T02868, D59976, AI525912, AA285331, C14077, AW178781, C16955, AW378542, C05763, Z33452, T02974, AI525237, AW179009, H67858, AI525222, AW178911, AI525928, AW378543, AI535959, AW378540, AW177722, AW352163, C13958, AW360855, AI535665, T03048, AW177728, C04682, D51053, D31458, Z30160, N66429, D80314, D80228, AC000378, A82595, AR060385, A84916, AB028859, AJ132110, A62300, A62298, AB0N2449, AR018138, AR008278, AF058696, I50126, I50132, I50128, I50133, AR016808, II4842, AR054175, Y17188, D26022, AR016514, X67155, A67220, Y17187, AR060138, Y12724, D89785, A45456, A94995, A26615, AR052274, A43192, A63261, A43190, AR038669, A78862, D34614, A70867, AR066488, AR008443, I82448, AR016690, U46128, AR062872, A30438, AR008277, AR008281, AR008441, A25909, Y09669, AR066487, D88547, I79511, A64136, A68321, X82626, D50010, AR008408, X68127, X64588, AR025207, AR060133, AF123263, and AR032065. |
| HNHIA20 | 5312 | 669685 | 1-408 | 15-422 | AA601673, AW088224, AI453383, AC007406, AL079340, AC020663, AC007707, Z95114, AC007934, AC005667, AP000557, AP000359, AP000692, AC003689, AP000326, AC004003, AC005071, L47234, AP000169, AP000054, AP000122, and AL132712. |
| HNHIA34 | 5313 | 706675 | 1-192 | 15-206 | AF110326, and AC004559. |
| HNHIA58 | 5314 | 736046 | 1-378 | 15-392 | AL078614, and AL109748. |
| HNHIA64 | 5315 | 745861 | 1-437 | 15-451 | AI355414, AA228442, AW192599, AI569100, AI754567, AI038304, AI249688, AI285696, AA605056, AI580707, AI570943, AA262752, AA779783, AA904211, AA297208, AI077941, AI755214, T03576, AA601218, AI049701, AA828834, AA838091, AW131356, AA689351, AA127222, AI039257, AA508036, AA525293, AW070532, AA343523, AA569402, AA369727, AA228979, AA229823, AA558404, AW081610, AI080307, AC005841, AC005071, AL022721, |

AC004217, AC005365, AL079295, AL049747, AF109907, AL049869, Z81369, AC003950, AL008725, AL080317, AC007993, AC001083, AC005531, AL109628, AJ246003, AC005180, AC005618, AC002312, AF196969, AF111168, AC005535, AC005220, U58668, AL031595, AC002400, AL035458, AC004596, Z83826, AL031848, AC004222, AC004223, AC004878, AL008582, AC006487, AL034420, AC005844, AC007688, Z83847, AC006544, AC005277, AC007225, AC005911, AC005229, AC004148, AC005500, AC005486, AC005300, AC002470, AC007227, AP000692, AC005003, Y14768, AF207550, AL049569, AC005821, AC005057, AP000103, AC005800, AL035405, AL022315, AL079304, AP000087, AP000505, AC005377, AL117694, AC002094, AC003983, Z94056, AC005288, Z86061, AC004638, AL109613, AC004491, AF031078, AC005274, AF134726, AC005081, AC005082, AL031427, AC007283, AC005261, AL080243, AC005089, AC005529, AF196972, AC005399, AP000553, U91326, AC003109, AF030876, AL121658, Z98048, AC007226, AC007308, AC007421, AL121653, AC002430, AL035249, AC002310, AC006101, AC005015, AC004797, AF129756, AE000658, AC011456, AC005921, AL109798, AC005940, AC005231, AC005412, AC005871, AC006064, AL031587, AC006077, AC007384, AC009509, AC004477, AL109952, AC006948, AP000117, AL022334, AC005252, AL133246, AC006468, AC005578, AC006006, AL049872, AC004883, Z98044, Z99716, AC007546, AL022322, AC004033, AC004475, Z81359, AL049843, U07563, AC004000, Z95116, AL031432, AC004812, AC006571, AC005157, AC004685, AC007731, AP000350, Z98304, AC005031, AL031133, AL022326, U91321, U80459, AC004832, AL031659, AC002477, AC006121, AL121652, AL035071, AC004494, AC005387, AL049766, AC004858, AF196971, AC000378, AP000689, AC004693, AL078584, AC008072, AC007551, AC011362, AC000353, Z99128, AP000045, AC005881, AC007676, U07562, Z70288, AL050306, AC007842, Z83844, AC004813, AL023575, AL080242, AC007774, AC005702, AC006953, AL133396, AC005971, AC002351, AL078638, AC005600, AC005668, AC005355, AC002554, AC002316, AC022517, AC002369, AC002395, AL050341, D87675, AC006285, AC003663, AC006315, AC004125, AL139054, AC004922, AC004150, and AC004531.

R93353, AA447817, AA574189, AW139964, W81697, AI887846, AA831618, AA677404, AI124782, AA447667, AA765804, AC008173, AF124523, AF146367, AF118808, Z83841, AC002464, AC005820, AC006048, AC004074, AP000509, D84394, AL096775, AL109954, AC007359, AC008175, AL096801, and AC006313.

AA663964, and AL035106.

AL121782.

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| HNHIA73 | 5316 | 559344 | 1-258 | 15-272 | |
| HNHIA94 | 5317 | 970720 | 1-295 | 15-309 | |
| HNHIA95 | 5318 | 908419 | 1-434 | 15-448 | |
| HNHIB22 | 5319 | 967038 | 1-348 | 15-362 | |
| HNHIB56 | 5320 | 734763 | 1-318 | 15-332 | |
| HNHIB77 | 5321 | 781214 | 1-396 | 15-410 | |
| HNHIB94 | 5322 | 793210 | 1-338 | 15-352 | |
| HNHIC39 | 5323 | 705375 | 1-410 | 15-424 | |

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| HNHIC46 | 5324 | 842003 | 1 - 441 | 15 - 455 | |
| HNHIC96 | 5325 | 779876 | 1 - 371 | 15 - 385 | |
| HNHID29 | 5326 | 690646 | 1 - 391 | 15 - 405 | |
| HNHID53 | 5327 | 727151 | 1 - 395 | 15 - 409 | |
| HNHID55 | 5328 | 731761 | 1 - 438 | 15 - 452 | AA169263, AA610219, N23896, AI053911, AA526630, AW074382, AA747469, AA719510, AA532882, AI537772, AI460009, AA961035, AA804925, AA378690, AA380354, AA829073, T60681, AA564865, AW191886, AI678368, AA526856, AA557883, AW021583, AA807583, AA679154, AA613624, AA533944, AI802801, AI720058, AA706291, AW410354, AA137013, AA662976, AA353907, AI383057, AA338544, AI791150, AA954924, AI254779, AA847515, AA599550, AA807845, AA127426, AA551105, AA630672, AA613232, AW148507, AI445088, R58559, AI249683, AA659535, AL047349, AW069572, AL037632, AF034194, AF037630, AA531580, C75192, AI267818, AA722297, AI654738, AW168520, AI811563, AA331301, AL079709, AI783549, AA948728, AA640277, AL120986, AA136577, AA011026, AA604840, AA864261, AA668387, AW082559, AI086830, AA664942, AL138329, AC005668, AC005722, AC007161, AC007308, AC004706, AL133382, Z84489, AC002470, AL096762, Z84487, AC006222, AC010209, AP000252, AC002538, AC006023, AP000134, AP000212, AC004522, AP000022, AC004801, AL079304, AC005288, AF207955, AC004967, AL022312, AC006353, AC006013, AC005796, AR036572, U91328, AC004694, AC005593, AL008707, AL021397, Z84469, AC006144, AC004263, AC000025, AF196969, AC005519, AC005527, Z97632, AC008012, AL050348, AL080243, AC006079, AC005340, AC005953, AC007136, AC004134, AC007845, AC006974, AF196970, AI031685, AC005335, AC007868, AC005529, AC005594, AC005280, AC004815, AC006275, AC009247, AC007066, AL133355, AL022069, AC007463, AC003009, AP000159, AP000017, AC000353, AL022320, AC003669, Z97183, AL109963, AF111167, AC002350, AP000359, AC002369, AC004517, Z82901, AC006211, AL135960, AJ131016, AL031846, AC004526, U89335, AL080241, AL133445, AC007226, AC005940, AC004864, AC005531, AC005932, AL031721, AB014077, Z93017, AC005495, AL008723, AC004212, AB023050, AP000512, AC005226, AC004841, AP000164, AF121781, AL022165, U16812, AC007193, AP000113, AC004558, AC005666, AC002070, AC009516, AC004209, AL031229, AC004938, AL139054, AC004656, AC002299, AC004934, AC006130, AC004097, Z83838, AC005736, Z95152, AP000964, AC005756, AL022315, AC004410, AC007435, Z85999, AC002105, AC005808, AP000300, AL034548, AF207550, U73169, AP000245, AC005837, AL035422, AL133448, AP000300, AL034548, AC016026, AL034549, AL008726, AL133371, AC004686, AC000094, AL096701, AF038458, AC004486, AL022721, AC002310, AL031311, AC010197, AF186194, Z93783, AL031296, AC006241, AL078476, AC002492, AF039907, AP000553, AL020997, AC005224, Z11900, AL096774, AC005255, AC005360, AF227510, U91322, AC000364, AP000514, AP000510, AP000556, AP000557, AC003007, AC007041, |

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| HNHID79 | 5329 | 774044 | 1 - 445 | 15 - 459 | AC005632, AL133297, AL049766, AC004099, AB022785, AL121769, AP000697, AC007666, Z97056, AL031680, AC004553, Y14768, AP000045, AL122020, AC002468, AP000550, AC007312, Z98752, AL031230, AC005160, AP000348, Z93023, AL034429, U85195, AF027390, AC004707, AL109939, AL031589, AL121603, AF065396, AC004778, AC004646, AC008018, AP000155, AP000505, AL049776, Z74739, AC000052, AL034376, AC005144, AC004776, AP000356, AC006001, AE000658, AC004812, AC006312, U95742, AC003950, AC004887, Z84480, AC005694, AC006138, AL049647, AC005823, AC004149, AL031432, AL049539, AC005695, AL078583, and AB023048. |
| HNHIE75 | 5330 | 765585 | 1 - 403 | 15 - 417 | |
| HNHIE82 | 5331 | 921945 | 1 - 652 | 15 - 666 | AA601335, AC002041, AC006359, AC006352, U91320, and AC007028. |
| HNHIG01 | 5332 | 916503 | 1 - 396 | 15 - 410 | AL110311, and AL035460. |
| HNHIG13 | 5333 | 465404 | 1 - 315 | 15 - 329 | AW385577, and AL035652. |
| HNHIG19 | 5334 | 668657 | 1 - 417 | 15 - 431 | AC005346. |
| HNHIG37 | 5335 | 708713 | 1 - 400 | 15 - 414 | |
| HNHIG68 | 5336 | 753025 | 1 - 398 | 15 - 412 | |
| HNHIG71 | 5337 | 465407 | 1 - 414 | 15 - 428 | |
| HNHIH23 | 5338 | 675262 | 1 - 311 | 15 - 325 | |
| HNHIH27 | 5339 | 681727 | 1 - 424 | 15 - 438 | |
| HNHIH29 | 5340 | 689891 | 1 - 182 | 15 - 196 | D45273, D80269, D59467, D80227, AA809122, D50995, D51079, D80043, D59275, T11417, D50979, Z21582, D80378, Z33452, C14077, F13647, T03048, T02868, D51423, AI525242, Z30160, H67854, D80188, D80247, D57483, C14331, T02974, D51799, AA514188, AI557774, C14344, D59610, C14407, D59927, AA305720, D80241, D58101, AI525237, AI525917, AI525920, AI525903, AI525238, N66429, AI525907, AI525227, AI525215, AI525969, AI535961, AR008277, AR008281, AB002449, AR016808, AR008278, A84916, I79511, AR054175, AR018138, and AF058696. |
| HNHIH46 | 5341 | 720333 | 1 - 402 | 15 - 416 | AA480792, AI687146, AA594072, AA351003, AA984114, AC002530, AC004637, AL009031, AC002326, AC002352, AC004408, Z70280, Z96104, AL033504, AP000503, AF134726, AC000134, AJ239322, AC005939, AL109847, AC002978, AL118498, AC004019, AL031733, AC008115, AB016897, AF095725, AL109623, AC002546, AC004125, AL139054, AC005859, AC008040, AC000081, AC005512, AP000326, AP000169, AP000054, AP000122, AC006088, Z97832, AL049830, AC000118, AL009178, AC004167, AL009174, AL034423, Z93017, AC007486, AC005881, AL109628, AP000555, AP000555, AC004084, U79746, AC002477, AC005229, AC002044, AC000353, AC005562, AL020997, AC002072, AL049694, AC005484, AC003043, AC012099, and AL136297. |
| HNHIH58 | 5342 | 739290 | 1 - 343 | 15 - 357 | AL031728. |

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| HNHIH66 | 5343 | 684531 | 1 - 162 | 15 - 176 | |
| HNHIH71 | 5344 | 760371 | 1 - 311 | 15 - 325 | AC005209. |
| HNHIH73 | 5345 | 765591 | 1 - 419 | 15 - 433 | AW069227, AW406755, AL041375, AI791659, AI479148, AI365988, AI358229, AI431303, AA502532, AI753365, AI354228, AI521525, AA226584, AI355246, AAS73020, AW151541, AW419262, AA482711, AA861959, AI609972, AI754926, AW193265, AA424249, R67701, AA128592, AI912401, AI356440, T29180, AI289505, AI926102, AI084012, F00982, AI431434, AA148489, H79586, AI362552, AA904211, AI471481, AA176605, AI798449, AA015948, AW316969, AA984258, AI244254, AI755214, AA610491, AW084173, AI88846R, AI797998, AW341955, AI634187, AA682912, AA846923, AI754105, AA584482, F36273, AA904275, AI569363, AW261996, AA601680, AA642809, AI044858, AC006064, AC004477, AC020663, AC006111, AL035684, AC005488, U85195, AC007376, AE000658, U47924, AP000462, AC005695, AC004834, AB017654, AC005081, AC005257, AL021546, AC002369, AP000557, AL049869, AC004019, AL049872, X55928, AC007993, AC008545, AL008726, AL009181, AP000348, AL022237, AC005037, AF111168, AC002425, AC006449, AL023575, AC005480, AC005041, AC004156, AC005255, AC005231, AC004752, AC007387, AF207550, AL135744, AC006125, AF053356, AC005034, U78027, AC005776, AC007421, AC006952, AC005215, AC004821, AC006512, AP000355, AC002544, AC002395, AD000092, AL035455, AC002310, U95742, AL034379, AC005048, AC003682, AL079295, AL035072, AC002316, AC004812, AC002126, AC005071, AL035089, AC005581, AC004491, AC004496, AC005409, AC004263, AC005971, AL034420, AC002477, AC005330, AC004983, AC005412, AC002492, AL031390, AC004216, AI034417, AL031767, AL022326, AL031311, AL031685, AC005305, AC006014, I51997, AC009516, AB000882, Z98752, AC005057, AP000211, AP000133, AC007785, AC016025, AL133245, AL022323, AC006011, AC000106, AC000075, AC007546, AL021707, AC004887, AL078581, AC000084, AL136295, AC005399, AL109758, AC002314, AL132641, AC005726, AC006112, AL096702, AC002491, AF011889, AL080243, AC007242, AC007298, AP000210, AP000132, AP000115, AL022476, AC007226, AC007216, AC008126, AC007845, Z86090, AL022165, AF045555, Z81369, AC005944, AL031662, Z98048, AC004008, AC005722, AC003029, AC007182, AC005740, AL121934, AC004150, Z92540, U29953, AL132642, AL133353, AC005069, AC006511, AC006315, AC004890, Z84480, AL096701, AC005527, AF109907, AC003982, Z99291, AC004167, AL031680, L44140, AC006139, AC007263, AP000511, AC004253, AC005193, AP000556, AP000552, Z84466, AC006441, AL034548, AL109827, AL050318, AL049831, AL031255, AC006530, AC007240, AC006241, AC004072, AC002347, AC005914, AC005378, AL022327, AC004494, AC005668, AF001550, AL021579, AF031078, AP000248, AL109963, AP000555, AC005519, AP000356, AF155238, AL034555, AP000512, AC006077, AP000045, AP000113, AC005746, Z82180, AL020095, AC003006, AL031005, AC006365, AF030876, AC006071, AC006948, AC002394, AP000501, AC007541, Z99716, AP000354, AL031228, AL031120, AC005516, AL035587, AC004543, AC005225, |

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| HNHIH82 | 5346 | 1-414 | 15-428 | AC003663, AC007066, AC005220, AC005180, AC004594, AC005900, AP000514, U95090, Z93023, D87675, AF165926, AC003101, AC003950, AC005197, AC007899, AC006137, AL049760, AC005288, AC009336, AC005324, AC005280, AC005759, U91321, AF129756, AC005261, AC004448, AL049749, AB015355, and AC005203. |
| HNHIH96 | 5347 | 1-596 | 15-610 | AL023653, and AL022162. |
| HNHIR84 | 5348 | 1-435 | 15-449 | AL023653. |
| HNHIS14 | 5349 | 1-405 | 15-419 | AC005137. |
| HNHIV95 | 5350 | 1-333 | 15-347 | |
| HNHIW13 | 5351 | 1-390 | 15-404 | |
| HNHIW35 | 5352 | 1-391 | 15-405 | AA121919, N69190, AI079423, AL119438, AI539009, Z99426, Z98051, AL121769, AL096853, AC005839, AC003663, AC002994, AC006077, AL121603, AC005529, AL109628, AC005755, AL021939, AC005726, AC005678, AL031594, AC004263, AC010582, AC005089, Z98745, AC004019, AP000512, AC005914, U85195, AE000658, Z83826, AI035587, AL009181, AC006571, AC007686, AL080242, AC004382, AC006372, AC005004, AL031589, AC002115, AC004955, AL080242, AC008015, AC006509, AC004087, AC006505, U96629, AC003682, AF038458, AL049636, AC005803, and AC004967. |
| HNHKH15 | 5353 | 1-409 | 15-423 | |
| HNHKI60 | 5354 | 1-335 | 15-349 | |
| HNHKJ24 | 5355 | 1-377 | 15-391 | AA847395, AA525331, R98239, AI473300, N49802, AA557790, AI609972, AA655005, AA486877, H68186, N95156, AI302917, AW272599, AW327624, AI037714, AW327282, AC003967, AP001050, AL022098, AF124730, U91318, AL109758, AC004771, AC005256, U95090, AC005330, AC005622, AL008726, AL049610, AL035588, AC004743, AF064861, AC004821, AP000688, AC007386, U82828, AC005722, AC005392, AC004456, AL024495, AC005907, AC006130, AL031777, Z93930, AC005006, Z83851, AC004881, AL024498, AL024509, AC004765, Z96074, AP001053, AL049869, AL109759, AC004382, AL133246, AC005799, AL034429, AC005048, AC004049, AB003151, Z69920, AL050307, AL031664, AL022165, AC005017, and AC005083. |
| HNHKL72 | 5356 | 1-301 | 15-315 | |
| HNHKL88 | 5357 | 1-461 | 15-475 | AA745582, AA553457, AI937850, AA515224, AA594145, AI570261, AI439360, AI623898, AA310868, AI659826, AW341890, AA704643, AA663306, AA587604, AA805373, AW338086, AA347930, T40077, AA743980, AI590772, AW406755, M86143, AI365988, AW250970, AA358409, AA347927, AA780929, AF147277, AL049776, AP000294, AL118497, AC002544, AC005291, AL035420, AL031276, AP000043, AF196779, AC002350, AC004854, U95742, AL008582, AC006285, AP000111, AC003965, AC002553, AC016025, AC005911, AL049557, AC004955, AF134726, AC010197, AC002470, AL121877, AC005231, AL035681, U96629, U75285, AC006241, AC008273, AC010200, AC004801, AF053356, AC005969, L44140, U91326, |

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| HNHKN73 | 5358 | 762011 | 1 - 548 | 15 - 562 | |
| HNHKP30 | 5359 | 793658 | 1 - 336 | 15 - 350 | AC005216. |
| HNHKP48 | 5360 | 721149 | 1 - 726 | 15 - 740 | AA421400, and AI208373. |
| HNHKP72 | 5361 | 761432 | 1 - 722 | 15 - 736 | |
| HNHKS69 | 5362 | 750487 | 1 - 318 | 15 - 332 | AA491361, AA297081, AA649079, AI362442, T31183, AI570805, AA468289, AI732682, AI872493, AI289050, AI872476, AI284092, H25626, AA337978, AI610900, R86141, H01852, AI078143, AA516045, AL035417, AC005043, AC011456, AF049895, AF001549, U52112, AC005881, Z85996, AC005244, AP000962, AL022336, AC006241, AC005480, AC007688, AC005625, Z82203, AP000689, AC022517, AB003151, Z93930, AC004383, AC007774, AL035071, M26434, AC006023, AL109653, and AL109657. |
| HNHKS75 | 5363 | 766926 | 1 - 311 | 15 - 325 | |
| HNHKT06 | 5364 | 934643 | 1 - 270 | 15 - 284 | |
| HNHKT75 | 5365 | 766924 | 1 - 128 | 15 - 142 | |
| HNHKV67 | 5366 | 751205 | 1 - 363 | 15 - 377 | AC000364. |
| HNHKW47 | 5367 | 786020 | 1 - 348 | 15 - 362 | H69968, AA601230, AL120191, AA878492, AW104800, AA629963, AI288033, AI800343, H93132, AA501867, AA362790, AA600132, AA653916, AA525769, AI246061, AA078509, AA079884, AA526662, AI223626, R72242, AW249541, AI312533, R84528, AI869786, AI054090, AA664248, AA678733, C14966, AI251241, AL134332, AI284543, AW238212, AI254770, AI251944, AI251034, AI251203, AI251284, AI250552, AW130446, R87912, AA088738, II37815, H41308, T08386, AL043315, AW419389, AA487829, AI138017, N25043, AW089950, AI249853, AA286727, AC005348, AC005180, U82828, Z94161, Z81369, AL079295, AC006537, AC007676, AL050333, AL033522, AC005049, AL024498, AF196969, AC005355, AL035067, AL109865, AL009177, AL022328, Z85986, AC006101, AC002117, AC004477, AC005921, AL023876, AL109627, AC007787, AC000070, AC004520, AC003071, AC008044, AC005486, AC005697, Z98051, AC005331, AC002364, AC006141, AF222686, Z85999, L43399, AC020663, AL050313, M89651, AF031078, AC006057, AC000067, AF030876, AC005943, AC006088, Z98884, AC004882, AP000260, AC004007, AL050318, AC004765, AL034549, AC002126, |

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| HNHKW76 | 5368 | 767917 | 1 - 499 | 15 - 513 | AC005409, Z97055, AC004834, AL049757, AP000512, AP000099, AC005703, AL022332, AL035588, Z93023, AC005529, AC004491, AC006318, AF186194, AL079339, AC005193, Z69721, AC007298, AC002404, AP000036, AC005911, AC005839, AL139054, AC005696, Z68277, AC007216, AP000159, AP000017, AL031729, AC005837, AC002369, AC006064, AL110114, AL023575, AC005668, AB023048, AC002123, AC005280, Z98036, AC006409, AL022324, AP000128, AP000206, AC007934, AC010209, AC005225, AC004382, AC010205, AC003009, AC002984, Z86090, AC007376, AC004042, AL031255, AC008101, AP000245, AC007938, AL096701, AC004771, AC006327, AC005354, AP000313, AL080243, AL023879, Z84483, AC002477, AC005006, Z84466, AL132777, AF165138, AL049874, AC006480, AC006388, AL132992, AP000555, AC008079, AD000812, AL049569, AC003957, AC007182, AC016830, AC004659, AF124523, Z79997, AC007656, AP000050, AL121748, L47234, AC002351, AF207550, AC001643, AC005632, AL109628, AL049872, AL034420, AC006160, AC006996, AP000117, AC000052, AF181897, AC005209, Z68756, AP000961, AL078611, U52112, AC006039, AC007225, AC002511, AC003110, AB016897, AI035450, AF118808, AC002091, AL033527, AC007242, AP000330, Z97652, AL049795, AC004019, AC006538, Z92542, AL121652, AC002543, AC006208, AF111163, AF053356, Z99916, AI049692, AC005217, AC005971, AL022476, AL049829, AC007227, AL021393, AC005620, AC004629, AL022322, AC005880, and AP000210. |
| HNHKW81 | 5369 | 761429 | 1 - 520 | 15 - 534 | |
| HNHKW83 | 5370 | 780650 | 1 - 519 | 15 - 533 | |
| HNHKX10 | 5371 | 963575 | 1 - 824 | 15 - 838 | |
| HNHKX38 | 5372 | 796804 | 1 - 513 | 15 - 527 | |
| HNHKX47 | 5373 | 789625 | 1 - 457 | 15 - 471 | AC007649. |
| HNHKX77 | 5374 | 771530 | 1 - 365 | 15 - 379 | AL008718. |
| HNHKZ11 | 5375 | 966164 | 1 - 708 | 15 - 722 | |
| HNHLA08 | 5376 | 958422 | 1 - 595 | 15 - 609 | |
| HNHLA16 | 5377 | 784264 | 1 - 800 | 15 - 814 | AA483274. |
| HNHLA55 | 5378 | 754480 | 1 - 652 | 15 - 666 | |
| HNHLA71 | 5379 | 761430 | 1 - 716 | 15 - 730 | AW087728, and Z98742. |
| HNHLA89 | 5380 | 786461 | 1 - 547 | 15 - 561 | AA036766, and W61087. |
| HNHLA90 | 5381 | 970724 | 1 - 595 | 15 - 609 | |
| HNHLB08 | 5382 | 958416 | 1 - 445 | 15 - 459 | AL046409, AW029038, F36273, AA482711, AI431303, AI350211, AI963720, AI284640, AW276827, AW162049, AI929531, AI679782, AW193265, AI962050, AW088202, AI613280, AI801482, AA469451, AW261871, AI669453, AI345654, AW419262, AL048925, AW088616, AW148792, AW021583, AI358501, AL037683, AA610491, AI061334, AI358229, AA101689, |